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Srovnání Šanghajské burzovních papírů s Burzovních papírů New York  
Comparison of Shanghai Stock Exchange and New York Stock Exchange

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1. Introduction
2. Characteristics of the Main Principles of the Stock Exchange Markets
3. Description of the Functioning of the Shanghai Stock Exchange
4. Description of the Functioning of the New York Stock Exchange
5. Comparison of the Selected Stock Exchanges
6. Conclusion

Bibliography

List of Abbreviations

Declaration of Utilization of Results from the Bachelor Thesis

List of Annexes

Annexes

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Herewith I declare that I elaborated the entire thesis, including all annexes,  
independently.

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## **1 Introduction**

As one of the most important parts of modern economy, stock exchange has already been around. Every day we can see it on TV, newspaper, website, etc. It is worth noting that it takes more than 400 years for its development. Using securities productions, the company gets more potential financing opportunities and further development. As an organized and standard organization, stock exchange plays an important role in finance development.

America securities market has longer history than Asia securities market, it's has more perfect and advanced productions and transaction system. As the largest stock exchange in the world, New York Stock Exchange has more than 3000 listed companies, and after 2006 the merger between New York Stock Exchange and Euronext help New York Stock Exchange has more market in the world.

China's securities market doesn't have long history, and Shanghai and Shenzhen Stock Exchange only have 22 years history. However, in this 22 year they really make a different for China development. In Shanghai Stock Exchange, listed companies change from 8 companies to 934 Companies in 2012. And after 2002, the A shares market is gradual open to foreign institution investors. In 2010, China decided to start stock index future and securities margin trading. However, this stock exchange is just in the beginning period. It's necessary to learn lots of things from the other stock exchanges.

The objective of thesis is comparison of Shanghai and New York Stock Exchange. On the one hand, it could help us know the differences between China and America or China and the world. On the other hand, it's a reference for China's future development.

In this thesis, the first part is main principle of securities market and stock exchange. In the parts second and third, it's focus on description of Shanghai Stock Exchange and New York Stock Exchange. The core part of thesis is fourth part: comparison, it's the main part of thesis. In comparison, according to different sectors we can get more specific information. That information will work in the future development of China's securities market and stock exchanges.



## **2 Characteristics of the Main Principles of the Stock Exchange Markets**

Because the stock market has been in our society for more than about 400 years, it has grown extremely into an international or worldwide place for trading stocks and bonds. Since the date of its birth, it has grown into a multi-billion or trillion business from all over the world up until today.

### **2.1 Stock Market Definition**

According to Encyclopædia Britannica<sup>1</sup>, in finance stock is the subscribed capital of a corporation or limited-liability company, usually divided into shares and represented by transferable certificates. The certificates may detail the contractual relationship between the company and its stockholders, or shareholder, and set forth the division the risk, income, and control of business.

Stock exchange, also called stock market, is organized market for sale and purchase of securities such as shares, stocks, and bonds. Mostly, stock exchange has two important functions. Firstly is a ready market for securities, it ensures their liquidity and thus encourages people to channel savings into corporate investment. Secondly is a pricing mechanism, it allocates capital among firms by determining prices that reflect the true investment value of a company's stock.

Membership requirements of stock exchanges vary among countries, mainly with respect to the number of members, the degree of bank participation, the seriousness of the requirements, and the level of government involvement. Trading is done in various ways: it may occur on a continuous auction basis, involve brokers buying from and selling to dealers in certain types of stock, or be conducted through specialists in a particular stock.

Electronic networks run modern market, providing stock exchange great speed and cost of transactions. Stock exchange is often called the most important element for a stock market. The demand and supply in the stock market is attracted by number of factors that affect the price of stock.

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<sup>1</sup> Source: Encyclopædia Britannica  
<http://www.britannica.com/EBchecked/topic/566714/stock-exchange>

## **2.2 History and Development in Capital Market**

Capital is the most important factor for modern economy. Capital market has its own story and history. Every continent has its special timeline for capital market development.

### **2.2.1 History and Development of the European Capital Market**

When we talk about stock exchange, we have to look back to the history of stock. The origin and development of stock own to an outstanding organization—company. *Company* is a business organization. It's a collection of individual real person and capital. This group has a common purpose or focus on gaining profits. And it's also a novel idea and organization at that time. After the first Industrial Revolution, the inefficient of productivity had a great improvement. Some companies grasped the opportunity to develop their company's scale and scope. Businesses needed vast amounts of capital to buy bigger premises and new machinery. Because the huge and hurry demand of capital, lots of business man or banks started to consider more efficient financial instrument.

In 15<sup>th</sup> century, new voyage discovery made European find more markets and fortunes.<sup>2</sup> The huge profits always come from high demand with low supply. The European has very high curious and demand of East Asian products. Before the Industrial Revolution, there only had few boat trains did business with East Asian countries, because of high risk. After the first Industrial Revolution, the voyage's risk was decreased by better energy and machinery, but the individual investors still sacred about risk. This is because if the boat train failed trade, the boat train and investors will face with bankrupt. In order to collect capital and go to Asia find more profits, boat train start to consider how to attract investors' investment. The best way is clear up the risk, but at that time it was impossible. So, some people came up with a new instrument that could spread, reduce and share the risk with all the investors. According to this kind of amazing idea the stock was be created by company.

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<sup>2</sup> Source: Silber, Kenneth *The Earliest Securities Markets*. Research magazine 32 (2): 44–47. May 2011

The first joint stock company was done by Dutch.<sup>3</sup> Joint stock companies were a novel idea at that time. In order to spread risk and getting more investors and capital, they allowed the shareholders to invest in a business venture. The difference was that the owners would be paid a share of the profits or be liable for their share of the losses the venture produced. This was the first time in history that business ventures could be taken on without putting any one single investor at too large a financial risk, while ensuring a very profitable opportunity as well. *The Dutch East India Company issued its shares firstly that was the first IPO in all over the world.* Soon afterwards, the Dutch East India Company issued shares were made trade on the Amsterdam Stock Exchange, which the first Stock Exchange in the world. The innovation of joint ownership made a great deal of Europe's economic growth possible following the Middle Ages. With the technique of pooling capital to finance the building of ships, the Dutch East India Company got good development. When Dutch East India Company issued shares and got capital, they started the first voyage to East Asian. After 10 year, the return boat train of Dutch East India Company brought lots of capital and traditional good and culture. The first per shareholder of Dutch East India Company got very high return. After that, lots of citizens prefer joint stock market to share profits and risks. Dutch East India Company approximately sat sail 5000 times to East Asian after 1603. In those 200 years, Dutch East India Company approximately sent one million European citizens to ocean international trade and carried back more than 2.5 million tons Asian goods and materials.

*Amsterdam Stock Exchange*,<sup>4</sup> the first Stock Exchange in the world was established in 1603. According to the succeed financing model in Dutch East India Company, lots of Dutch companies follow the example of Dutch East Company's financing model. They issued their share to public then got the capital to develop their own business. The shares they issued were traded on Amsterdam Stock Exchange, made the Amsterdam Stock Exchange got a good development and became more active. The stock price expressed the people's hope and wish for company. The success of Dutch East India

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<sup>3</sup> Source: Lodowijk Petram *The World's first Stock Exchange* PhD Thesis , October 2011

<sup>4</sup> Source: Stock Exchange and History of Exchanges  
<http://eskylessons.blogspot.cz/2010/07/lesson-1-stock-exchanges-and-history-of.html>

Company brought huge confidence and development for this new finance market. The established stock exchange made the capital more effectively flow, and it's also brought a strong impact on Dutch International trade position in all over the world.

In 1621, the Dutch set up the Dutch West India Company that tried to control North American International trade. But before the Dutch West India Company was set up, the Britain and Spain were ready to enlarge their market in North America. In 1626, *the Dutch West India Company bought property in land from American Indian and named it as New Amsterdam*. At that land, the new city New Amsterdam, nowadays, that place became the most active capital working place. The Dutch still improved the finance market and innovated the financial instrument, the bank system innovated the exchange system to help the different currencies in international trade. With the influx of a large number of foreign funds, as well as domestic financial markets are more active than ever, making Amsterdam become the first financial centre in all over the world in 1630s.

However, with British economy continues to develop and strong, finally, the contradiction between Britain and Netherlands existed. The *Anglo-Dutch Wars*<sup>5</sup> were a series of wars fought between the England and the Dutch in the 17<sup>th</sup> and 18<sup>th</sup> centuries for control over the seas and trade routes. After four wars of the Anglo-Dutch Wars, Dutch Republic spent too much treasury on wars, its result in the Dutch's power decreased.

After the English took of the Dutch's colony New Amsterdam, and named as New York. The British took place the Glorious Revolution. This revolution brought an eternal realignment of power within the English constitution, the political system of England changed from the Absolute Monarchy of the Tudors to Constitutional Monarchy and the rule of Parliament. The new balance of power between parliament and crown made the promise of the English government more credible. The Glorious Revolution changed the centre was taking the financing decision away from Monarchy, and putting them to Parliament.

Following the Glorious Revolution that the personal property rights more secure and people are more prepared to take some financial risk. In this background, the financial

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<sup>5</sup> Source: Trade Wars <http://data.book.hexun.com/book-6062.shtml>

market of England interested more foreign funds and investors. The central of world financial market removed from Amsterdam to London.

In 1688, the *London Stock Exchange*<sup>6</sup> was born. Trade in the London Stock Exchange began with the demand of finance two British voyages: The Muscovy Company and The East India Company. The Muscovy Company's voyage attempted to reach China via the White Sea, and north of Russia. The East India Company's voyage attended to India. Without the financial support these journeys can't come true. Unable to finance these expensive journeys privately, the companies raised the money by selling shares to businessmen, giving them a right to portion of any profits eventually made. The idea was soon accepted. It's estimated that by 1695 there were 140 stock joint companies. London's first stock brokers were forbidden from the old commercial center known as the Royal Exchange. Instead, the new trade was conducted from coffee houses along the City's Exchange Alley.

After the Glorious Revolution, British spend 160 years to the change of power issuing Treasury Bonds, the emergence of multinational banks, and the birth of the Central Bank. Finally, the British pushed modern finance to a new high level, and push modern finance to all over the world. America, this new independent country, carried forward Dutch's modern finance principle and British modern finance system, became the biggest beneficial owner.

The stock exchange was also developing in Germany. The origins of the *Frankfurt Stock Exchange*<sup>7</sup> go back to the 9<sup>th</sup> century with the Emperor Louis the German issuing a letter to hold free trade fairs. By the 16<sup>th</sup> century Frankfurt developed into a wealthy and busy city, with an economy based on trade and financial services. In 1585, a stock exchange was established to set up fixed currency exchange rates to allow for trade on different currencies.

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<sup>6</sup> Source: London Stock Exchange <http://www.londonstockexchange.com/home/homepage.htm>

<sup>7</sup> Source: History of Frankfurt Stock Exchange  
[http://deutsche-boerse.com/dbg/dispatch/en/kir/dbg\\_nav/about\\_us/20\\_FWB\\_Frankfurt\\_Stock\\_Exchange/70\\_History\\_of\\_the\\_FWB](http://deutsche-boerse.com/dbg/dispatch/en/kir/dbg_nav/about_us/20_FWB_Frankfurt_Stock_Exchange/70_History_of_the_FWB)

### 2.2.2 History and Development of the American Capital Market

*When the U.S. government issued \$80 million in bonds to pay off its Revolutionary War debt, the investment markets were born*<sup>8</sup>. The first exchange in America was created on the street corner of 68 Wall Street, in New York City. They called the agreement the Buttonwood Agreement, since it was signed by twenty-four brokers under a buttonwood tree, in May 17, 1792. The name changed to the New York Stock and Exchange Board some time later. The New York Stock and Exchange rented a place at 40 Wall Street, in 1817, for only \$200 a month. The location served them well for almost 20 years, but as destroyed in New York's Great Fire in 1835. Finally, about thirty years later, during the Civil War, the name was changed once again to its current name, the New York Stock Exchange. During the Civil War, in order to collect more money for the war, government issued lots of bonds, and the brokers helped government to sell the Government's bonds. Because of the successful selling, government had enough reserve to fight with Confederates States of America. In the four years of the Civil War, the Wall Street totally helped American government issued bonds and provided the capital for the United State for the Civil War.

After the Civil War, some people said that the United State won the war because of finance and Wall Street. All of this money, they had flow through the Wall Street. So, the Wall Street tended not very important market in the world to be the second large market, while after the London. Good development of capital market in America made American Industry became a new structure. More and more big company started to merger and acquisition lots of small companies. In the end of the 19<sup>th</sup> century, every year there were almost 3000 small companies disappear. In 1901, there were approximately 800 Trust Organizations in America, and there have 72 trust companies could controlled 40% in their industry territory. American Industry tended to a monopolist time. Lots of wealth was concentrated on few people. The Wall Street and stock market was the backstage operator. However, because of the monopolist, American economy and capital market really got a huge development. At that time, London still was the biggest finance market and stock market in the world.

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<sup>8</sup> Source: Wall Street: The Power of Finance <http://data.book.hexun.com/book-6160.shtml>

Good times don't last long. On September 4, 1929, the stock market in America hit an all-time high. Banks were invested in stock market, and individual investors borrowed money to invest in stock market. On October 29, 1929, the stock market dropped 11.5%, bringing the Dow 39.6% off its high. After the crash, the stock market mounted a slow comeback. By the summer of 1932, the Dow had lost almost 89% of its value and traded more than 50% below the low it had reached on October 29, 1929. In total, 13 billion dollars of wealth were lost during the market crash. Following the crash, the Securities and Exchange Commission (SEC) was established. Before long, the First World War and Second World War was break out. During the war period, London lost the position of the biggest finance market and stock market, because of the huge war consumer. After the Second World War, the United State became the biggest power country, not only on the policy, but also on the finance and economy.<sup>9</sup>

### **2.2.3 History and Development of the Asian Capital Market**

The first stock exchange in Asia is Bombay Stock Exchange and it was established in 1875 in Mumbai, India. The Tokyo Stock Exchange was established in 1878. Following the European countries expanded their colony in Asia. Lots of Asian countries started their political revolution, economic revolution and culture revolution. Stock Exchange, this modern and important finance institution also got a good developing in Asia.

The rise of stock and securities trading in Asia over the past 20 years is due in part to the Asian Miracle, which lots of capital was invested in developing nations. During the 10 years period from 1985 to 1995, the Thai economy grew at 9% a year, and South Korea ranks as the world's 11<sup>th</sup> largest economy. The booming economic climate and optimistic financial projections resulted in a big rise in stock prices and overly aggressive speculation. After the 1979, China started the revolution. The China decided to find a new way for Chinese economy and market. The revolution and opening policy gave China's capital market a good opportunity. *In 1991, the Shanghai Stock Exchange was founded.* In 1998, the East Asian Crisis made a huge lost for East Asian nations.

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<sup>9</sup> Source : <http://www.u-s-history.com/pages/h1806.html>

China government provided lots of help for Hongkong. But after that, lots of East Asian countries strengthen financial regulation and management. Thereafter, Asia stock market still has a good development.

#### **2.2.4 Further Development**

With the third Industrial Revolution, computer changed people's daily life. It also changed the financial transaction and development. With the computer revolution just starting, the world needed an electronic stock exchange. In 1971, the NASDAQ was established. If people said that the New York Stock Exchange and American Stock Exchange represent the history of the stock markets in the United State, the NASDAQ represents the present, even the future. It's a virtual market, no room, no trading floor. This is the first just a bulletin board for buyers and sellers to see posted prices but did not allow actual orders to take place through computers. With price viewable on a screen to everyone was spread to the bid price and ask price. NASDAQ operates by buying and selling what are called over-the-counter stock market. Those are stocks brought and sold outside of the organized stock markets. OTC trading is the single largest securities market in the United States today, including almost all government securities and municipal and corporate bonds. NASDAQ provides price quotation on approximately 5000 of more actively traded OTC stocks. The exchange includes all types of companies, but is traditionally home to many high-technology stocks, they include Microsoft, Inter, Dell and Cisco. This is a significantly change for stock exchange. It is one of the most efficient stock exchanges in the world and it surpassed the average trading volume of New York Stock Exchange in October 2004.

### **2.3 Roles of Stock Exchange<sup>10</sup>**

Stock exchange is key market infrastructure entity. The efficiency of the secondary market in providing liquidity and accurate price discovery facilitates efficient raise of capital for commercial companies benefiting both the wider corporate sector and the

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<sup>10</sup> Source: Diamond, Peter A.. *American Economic Review* [magazine] 1967  
*The Role of a Stock Market in a General Equilibrium Model with Technological Uncertainty*. <http://www.jstor.org/discover/10.2307/1815367?uid=3737856&uid=2&uid=4&sid=56236025843>



economy as a whole.

In our real life, stock exchange have various of roles for our nation and economy, they are offering market places, raising capital for businesses expansion, mobilizing saving for investment, facilitating company development, profit share, corporate governance, creating investment opportunities for small investors, government capital-raising for development projects, regulating and maintaining the order for transaction, barometer of economy, and information offering and transparency.

### **2.3.1 Offering Market Place**

According to the definition of stock exchange, the most basic and important role is offering a place for investors and brokers has a common market place to go though the transaction. Stock Exchange for the parties to the transaction of securities trading facilities and services such as communications systems, computer equipment, apply for securities clearing and transfer, etc., so that the parties to the Securities and Exchange quickly and easily complete the securities trading activities. The existence of the exchange, make fund-raising by a convenient financing channel, but also to provide investors with a variety of investment tools and orderly market place. Centralized trading of securities is conducive to maintaining the liquidity of the securities, and improving the efficiency of the allocation of funds.

### **2.3.2 Raising Capital for Businesses Expansion**

The stock exchange provides companies capital to expand business though selling shares to the public. General, there are four common forms of capital rising: going public, limited partnerships, venture capital, and corporate partners.

Going public means a company is switching from private ownership to public ownership. Going public, usually was applied to high technology companies. Those companies always need huge capital for their startup. By this reason, the public market provided by stock exchanges, has been one of the most important funding sources for many capital intensive startup. Lots of high technology companies though going public got enough capital to develop their companies. Even though there was a huge

high-technology stock market bubbles in 2000, every year still a number of companies, including unknown highly speculative and financially unpredictable high technology startups, are listed for the first time on all the major stock exchanges. There are even specialized entry markets of those kinds of companies.

### **2.3.3 Mobilizing Saving for Investment**

The third role of stock exchange is mobilizing saving for investment. In the society, there have a number of free capitals which are not used. When people draw their saving and invest in share, it usually leads to rational allocation of resources because funds, which could have been consumed, or kept in idle deposits with banks, are mobilized and redirected to help companies' management boards finance their organization. It's could promote companies, industries and whole economy with growth and improvement.

### **2.3.4 Influencing the Company Development**

China is a socialist country. Before the reform and open policy, the companies in China were state ownership. Employees and employers didn't have enough competitive attitudes for company's long-term development. However, after Shanghai Stock Exchange has good development and government's policy. More and more companies reform them ownership. Even though, in China there still have lots of shares untradeable, the companies still have more opportunities for financing in capital market.

### **Facilitating Company Development**

For a company, development means opportunity to expand product lines, increase distribution channels, hedge against volatility, increase its market share, or acquire other necessary business asset. Acquiring capital could promote company increase its capitalization and asset for future development. Merger agreement through the stock market is one of the simplest and most common ways for a company development.

### **Share Profits with Public**

Without the stock exchange, companies are hard to going public and issue their

share, and people are hard to buy the share of company. Because of stock exchange, both casual and professional investor, as large as institutional investors or as small as an ordinary middle class family, through dividend and stock price increases that may get profits or capital gain. Share in wealth of profitable businesses.

### **Corporate Governance**

Corporate governance is the system by which companies are directed and controlled. It involves a set of relationships between a company's management, its board, its shareholders and other stakeholders. It deals with prevention or mitigation of the conflict of interests of interest stakeholders. Ways of mitigating or preventing these conflicts of interests include the processes, customs, policies, law, and institutions which have impact on the way a company is controlled. An important theme of corporate governance is the nature and extent of accountability of people in the business, and mechanisms that try to decrease the principal agent problem. By having a wide and varied scope of owners, companies generally tend to improve management standards and efficiency to satisfy the demand of these shareholders, and the more stringent rules for public corporations imposed by public stock exchanges and the government. Consequently, it is alleged that public companies tend to have better management records than privately held companies. Company always has lots of different goals for different department, the stock exchange could help company to manage and control the financial situation. Issuing share could help company adjust the proportion of equity and liability. It is better for company's development.

### **2.3.5 Improving the Capital Market and Economy**

Before 1980's, the capital market and international economic was a far dream for Chinese people. After reform and open policy, capital and capital market become more and more close to Chinese people's daily life. In 1990, Shanghai Stock Exchange and Shenzhen Stock Exchange were established. It was an outstanding event for China's economic development. Government allowed and promoted the capital market develop, and GDP and GNP has remarkable improvement. After 1990, in those 22 years, the

stock market brings huge opportunity and development for China's economy. It's also being the pain and sad for Chinese people. In general, stock exchange shows its remarkable influence for China's economy development.

### **Creating Investment Opportunity for Small Investors**

When a security is issued on primary market, then it could liquidity in secondary market. In secondary market, there nearly without any limits for enter this market. So in stock exchange investing in shares is open to both the large and small stock investors. Therefore the stock exchange provides the opportunity for small investors to own shares of the same companies as large investors.

### **Government Capital-raising for Development Projects**

Governments can't issue stock to collect capital for some special projects or development. But in stock exchange's bond part, governments' bonds are mainly part. The issuance of such bonds can obviate the need, in the short term, to directly tax citizens to finance development—though by securing such bonds with the full faith and credit of the government instead of with collateral, the government must eventually tax citizens or otherwise raise additional funds to make any regular coupon payments and refund the principal when the bonds mature.

### **2.3.6 Regulation and Protection for Fair Transaction**

Our world is made up with rules, a fair rule could achieve a good deal. It's also up to stock market and stock exchange. And information will decide the result in stock market. So the standard and complete regulation and supervision is very important for stock transaction. Here, the stock exchange could play a remarkable role for fair transaction.

#### **2.3.6.1 Regulating and Maintain the Order of Stock Transaction**

Trading rules include in the listing and delisting rules, offer bidding rules, information disclosure rules as well as delivery and settlement rules. The main difference between different exchanges key lies in the differences in trading rules, the

same exchanges also may use a variety of trading rules, and thus the formation of market segments, broken down according to different listing requirements such as the NASDAQ could divide into Global Select Market, the global market and capital markets. But any trading rules are not perfect, and trading rules may not be able to be effectively implemented, therefore, a core role of the Exchange is the supervision of various violations of the principle of fairness and trading rules of behavior, so that the trade fair and orderly.

#### **2.3.6.2 Information Offering and Transparency**

Securities transactions rely on the information, including information of listed companies and securities transactions. Stock Exchange has the responsibility to supervise and appropriate responsibility for the review, it's also has the obligations publicity listed company's information which trading on market of negative.

#### **2.3.7 Serves as Economic Barometer**

At the stock exchange, share prices rise and fall depending, largely, on market forces. Share prices tend to rise or remain stable when companies and the economy in general show signs of stability and growth. An economic recession, depression, or financial crisis could eventually lead to a stock market crash. Therefore the movement of share prices and in general of the stock indexes can be an indicator of the general trend in the economy.

### **2.4 Functions of Stock Exchange**

Stock exchange helps to ensure the continuity of securities transactions at a reasonable price, to achieve the efficient allocation of resources, and promote the efficient flow of capital and capital market deepening through innovative trading tools and trading. So, stock exchange has those three functions<sup>11</sup>:

- Facilitating the financing and convenience investment;
- Improving the fair of the stock transaction;

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<sup>11</sup> Source: Securities Market <http://china.findlaw.cn/falvchangshi/zhengquan/zqjy/>

- Improving the innovation of capital market.

#### **2.4.1 Facilitating the Financing and Investment**

Stock Exchange, a collection of a large number of securities and financial needs, help to ensure the continuity of the Securities and Exchange provides great convenience for the investors to enter and exit the capital markets, which will attract a wide range of funds to the capital markets up development of the company to provide the necessary funds to expand direct financing channels for enterprises. From the perspective of historical development, the Stock Exchange is a financing and investment needs, in turn, the development of the Stock Exchange to promote the development of financing and investment, in order to stimulate the development of the economy as a whole

#### **2.4.2 Improving the Fair of Stock Transaction**

Centralized transaction brings together a variety of information for buyers and sellers, demand and supply balance to the formation of market prices, market prices reflect supply and demand conditions, which passed a summary signals reflect the views of all parties. Stock Exchange has its fair trading rules for the centralized trading of securities with orderly platform market transactions to reflect the demand and supply information to form a reasonable market price. The market price reflects the company's performance and prospects for development, to guide the flow of funds towards the most efficient, in order to achieve efficient allocation of resources.

#### **2.4.3 Improving the Innovation for the Capital Market**

According to international experience, the Stock Exchange is the leader of the capital market innovation. Stock Exchange based on market conditions, continue to introduce new financial products, in order to improve market liquidity, and a variety of investment needs.

### **2.5 Main Stock Exchanges in the World**

In the world, there are sever stock exchanges stand in front of whole financial

market. According to the market capitalization and trade value, we can get range of stock exchange from WTE.

**Table 2.1 Major Stock Exchange in the World**

Rank ♦	Economy ♦	Stock Exchange ♦	Location ♦	Market Capitalization (USD Billions) ♦	Trade Value (USD Billions) ♦
1	 United States  Europe	NYSE Euronext (US & Europe)	New York City	14,242	20,161
2	 United States  Europe	NASDAQ OMX (US & North Europe)	New York City	4,687	13,552
3	 Japan	Tokyo Stock Exchange	Tokyo	3,325	3,972
4	 United Kingdom	London Stock Exchange	London	3,266	2,837
5	 China	Shanghai Stock Exchange	Shanghai	2,357	3,658
6	 Hong Kong	Hong Kong Stock Exchange	Hong Kong	2,258	1,447
7	 Canada	Toronto Stock Exchange	Toronto	1,912	1,542
8	 Brazil	BM&F Bovespa	São Paulo	1,229	931
9	 Australia	Australian Securities Exchange	Sydney	1,198	1,197
10	 Germany	Deutsche Börse	Frankfurt	1,185	1,758
11	 Switzerland	SIX Swiss Exchange	Zurich	1,090	887
12	 China	Shenzhen Stock Exchange	Shenzen	1,055	2,838

Source: WFW <http://www.world-exchanges.org/>

### 2.5.1 New York Stock Exchange & Euronext<sup>12</sup>

The New York Stock Exchange, commonly referred to as NYSE is a stock exchange located at 11 Wall Street, Lower Manhattan, New York City. Until the NYSE went both electronic and public in April 2006, the exchange was a membership-only organization. Merging with the already publicly-traded Archipelago electronic stock exchange, the new company was called the NYSE Group.

In 2008, NYSE Euronext welcomed the historic American Stock Exchange into the world's largest and most liquid exchange group. It is by far the world's largest stock exchange by market capitalization of its listed companies at US\$13.39 trillion as of Dec 2010. Average daily trading value was approximately US\$153 billion in 2008.

<sup>12</sup> Source : NYSE & Euronext <http://www.nyse.com/>

### **2.5.2 NASDAQ OMX<sup>13</sup>**

The NASDAQ OMX Group, is an American multinational financial services corporation that owns and operates the NASDAQ stock market and eight European stock exchanges in the Nordic and Baltic regions and Armenia under the NASDAQ OMX banner. It is headquartered in New York City, and its president and chief executive is Robert Greifeld. Today, the NASDAQ OMX Group owns and operates 24 markets, 3 clearing houses, and 5 central securities depositories, spanning six continents--making us the world's largest exchange company. Eighteen of our 24 markets trade equities

### **2.5.3 Tokyo Stock Exchange<sup>14</sup>**

The Tokyo Stock Exchange, is a stock exchange located in Tokyo, Japan. It is the third largest stock exchange in the world by aggregate market capitalization of its listed companies. It had 2,292 listed companies with a combined market capitalization of US\$3.8 trillion as of Dec 2010. The TSE is incorporated as a kabushikikaisha with nine directors, four auditors and eight executive officers. It is the largest financial district in Japan. Stocks listed on the TSE are separated into the First Section for large companies, the Second Section for mid-sized companies, and the Mothers section for high-growth startup companies. As of October 31, 2010, there are 1,675 First Section companies, 437 Second Section companies and 182 Mothers companies

### **2.5.4 London Stock Exchange<sup>15</sup>**

The London Stock Exchange is a stock exchange located in the City of London in the United Kingdom. The London Stock Exchange is at the heart of the global financial market and is home to some of the largest, most successful and dynamic companies in the world. The Exchange is the most international of all over the world's stock exchanges, with around 3,000 companies from over 70 countries admitted to trading on its markets. As of June 2011, the Exchange had a market capitalisation of US\$3.7495

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<sup>13</sup> Source : NASDAQ <http://www.nasdaq.com/>

<sup>14</sup> Source : Tokyo Stock Exchange <http://www.tse.or.jp/english/index.html>

<sup>15</sup> Source : London Stock Exchange <http://www.londonsstockexchange.com/home/homepage.htm>



trillion, making it the fourth-largest stock exchange in the world by this measurement

### **2.5.5 Shanghai Stock Exchange<sup>16</sup>**

The Shanghai Stock Exchange, is a stock exchange that is based in the city of Shanghai, China. The Shanghai Stock Exchange (SSE) was founded on Nov. 26th, 1990 and in operation on Dec.19th the same year. It is a membership institution directly governed by the China Securities Regulatory Commission (CSRC). It is one of the two stock exchanges operating independently in the People's Republic of China, the other is the Shenzhen Stock Exchange. Shanghai Stock Exchange is the world's 5th largest stock market by market capitalization at US\$2.7 trillion as of Dec 2010. Unlike the Hong Kong Stock Exchange, the Shanghai Stock Exchange is still not entirely open to foreign investors, due to tight capital account controls exercised by the Chinese mainland authorities.

## **2.6 Stock Index**

*Stock Index*<sup>17</sup> (stock market index) is a statistical measure of change in a security market. Each index has its own calculation methodology and it's usually expressed in terms of a change from a base value.

Back to the end of 19<sup>th</sup> century, there was no internet, radio or television. Most people got information from word of mouth, newspapers or short pamphlets. One such pamphlet was the "Customer's Afternoon Letter", which was a daily financial new bulletin produced by Charles Dow. This type of bulletin, or news service, was the forerunner of new services like the Wall Street Journal. Since 1884, the "Customer's Afternoon Letter" included a stock average called the Dow Jones Average. This small list contained nine railroad companies and two industrial companies. It was founded on May 26, 1896, and is now owned by Dow Jones Indexes, which is majority owned by the CME Group. Along with the NASDAQ Composite, the S&P 500 Index, and the Russell 2000 Index, the Dow is among the most closely watched U.S. benchmark

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<sup>16</sup> Source: Shanghai Stock Exchange [http://www.sse.com.cn/en\\_us/ps/home.shtml](http://www.sse.com.cn/en_us/ps/home.shtml)

<sup>17</sup> Source: World Stock Exchange Indices <http://www.world-stock-exchanges.net/indices.html>

indices tracking targeted stock market activity.

**Table 2.2 Main Stock Index in the World**

Index Name	Value	Time
<b>Americas</b>		
Dow Jones Industrial Average	12,127.95	5.6.2012
S&P 500 Index	1,285.50	5.6.2012
NASDAQ Composite Index	2,778.11	5.6.2012
S&P/TSX Composite Index	11,507.71	5.6.2012
<b>Europe, Middle East &amp; Africa</b>		
FTSE 100 Index	5,260.19	6.1.2012
CAC 40 Index	2,986.10	5.6.2012
IBEX 35 Index	6,267.80	5.6.2012
FTSE MIB Index	12,973.66	5.6.2012
<b>Asia-Pacific</b>		
Hong Kong Hang Seng Index	18,406.50	5.6.2012
S&P/ASX 200	4,046.70	5.6.2012

Source: World Stock Exchange Indices

## 2.7 Supervision in Stock Market

Capital market and stock market is a place where full of money. People are easy to lose themselves when they face with the huge profits. Sometimes, they will forget the risk and law. Facing this kind of crazy market, people decided to made some rules or regulations to protect whole market when they faced with few times crisis. The first agreement about regulation was the Buttonwood Agreement. The 24 brokers signed at Wall Street and made some basic regulation for bonds and stocks exchange.

After few financial crises, many countries established their own organization to supervising stock market, making law and police to avoid financial crash. For instance, after the 1929 financial crash in the United State, the America established their regulator: Securities and Exchange Commission (SEC). The European also has their regulator: The European Securities and Markets Authority (ESMA). According to different market situation and different economy and policy situation, lots of countries have their regulator. But, the regulators really have lots of benefit for stock market development.

## **2.8 Development and Future of Stock Exchanges**

From the perspective of the development of the world's major stock exchanges, stock exchanges increasingly clear positioning as a competitive enterprise. Their strategic statements such as the London Stock Exchange as follows: in the global competition in the financial transactions to be selected by the customer market, efforts to develop the existing business and through appropriate business innovation, acquisitions, joint ventures, joint to expand their scale of operation. Its competitive positioning of the enterprise to adapt the stock exchanges around the world is moving in the direction of the Company, integration and restructuring, product diversification, and accelerates development of technological progress.

### **2.8.1 Corporatization and Going Public**

In the early stages of development, the Stock Exchange is one for members to provide a centralized trading service institutions, so that the form of a membership-based organization. Later, as a form of organization of the corporate system, the Exchange is generally accepted, the Stockholm Stock Exchange in 1993 became the first reorganized into joint-stock companies, stock exchanges, in October 1998, the Australian Stock Exchange, becoming the world's first listed for trading on stock exchange. At present, the major stock exchanges in the international arena have been listed, such as New York, London, France, Germany, Asia, Singapore and Hong Kong, China. Tokyo Stock Exchange is seeking to market.

### **2.8.2 Integration and Restructuring**

Even prior to the 1990s, people still difficult to consider the Stock Exchange as a competing enterprise. General point of view, the stock exchange to provide the product with the characteristics of public goods, seems to be a natural monopoly. However, with the rapid development of technology and the globalization of capital markets, geography and informatics of the intervals are no longer be an obstacle, the New York Stock Exchange and the Pan-beaten merger of the exchanges in 2006 and 2007, the NASDAQ and the Swedish OMX company the merger strongly suggests that such a

trend. In June 2006, the New York Stock Exchange and Euronext reached a total of about \$ 10 billion merger agreement to form the world's first transatlantic NYSE – Euronext and Deutsche Boerse.

### **2.8.3 Cross-border Listing and Product Diversification**

In addition to mergers between exchanges, the exchanges between the contention of the listed resources are becoming increasingly fierce, especially listed companies in emerging markets, the major securities transactions are unwilling to give up easily. London Stock Exchange, Singapore Exchange have come to the mainland of China to show and release of a friendly signal to the mainland of China company to be listed; Tokyo, Korea Exchange is also very active in China; New York Stock Exchange are that far apart, but also take the initiative to come to fight it. Hong Kong action much earlier than, as early as 1993, before its return to the H shares existed. Until the August 1<sup>st</sup>, 2011, there are 80 companies listed on New York Stock Exchange.

### **2.8.4 Accelerating Development of Technological Progress**

Stock market trading and settlement system will directly affect the safety of the securities market, liquidity and transaction costs, so the exchanges recently have invested huge resources, including human and financial resources, including improved technology systems, to improve the core competitiveness.

### **3 Description of the Function of the Shanghai Stock Exchange**

Stock market in New China started in 1980's, at that time the uniform transaction place was not existence, stock market just had small scale and lacked standardization. From 1990, Shanghai Stock Exchange and Shenzhen Stock Exchange was established, it was consist of the central and uniform stock transaction market in China. On another way to say, the Shanghai and Shenzhen Stock Exchange was company with China's economy development and China's economic reform.

#### **3.1 History of Shanghai Stock Exchange**

China Securities history [Liu, 2010] can be traced back to the late Ming and early Qing Dynasty, in some high-income high-risk business areas, the mode of "investment funds, joint ventures" was operated, and the contract signed between the participants, to become China's first stock prototype. Before the Opium War between Britain and China, west countries international traders not only brought the opium to China, but also brought the advanced finance model and knowledge to China. The first foreign security was issued by a foreign enterprise in 1840s. In 1872, the first Chinese stock was issued by China's first joint-stock companies and the Chinese people. Securities promote the development of securities transactions and capital market. The beginning the Securities and Exchange were only foreigners, and later the Chinese businessmen started to use the securities transactions. China's first stock trading securities companies was established in 1869. One of the earliest Shanghai stock companies was established in September 1882 and developed the relevant articles of association, the Securities and Exchange haphazard development has become more standardized. In 1891, the Shanghai Share brokers Association was established, which was regarded as the primitive form of stock bourses in china.

In 1920 the Shanghai Securities & Commodities Exchange was established, and a year later the Shanghai Chinese Merchant Exchange began. They were combined in 1929, and were then named the Shanghai Stock Exchange. By the 1930s, Shanghai had emerged as the financial center of the Far East, where both Chinese and foreign investors could trade stocks, bonds and government bonds. Until the beginnings of the

Second World War, insurance and shipping predominated, but by then, Japan was establishing factories in Shanghai, and rubber became the biggest cash crop. But once Japan held the Shanghai International Settlement, trading on the Shanghai Stock Exchange stopped, not to resume until 1946. But it was ceased operations there years later in 1949 when the People's Republic of China was found.

After the founding of People's Republic of China, all the capitalism was strictly prohibited. Until the Third Plenary Session of the Eleventh Central Committee in 1978, China decided to change the foreign policy: the policy of reformation and opening. After that, China accepted lots of economic institutions of capitalism. China once again began interacting with the outside world. In the 1980s China's economic reforms and its securities markets both grew fast as China converted to a socialist economy. Trading bonds resumed trading in 1981, and corporate bonds and stocks made their debut in 1984. According to China's special social system, before Shanghai Stock Exchange was established, government decided to separate company's shares. The state-own shares and private shares were temporary forbidden listed and transaction, only allowed public shares listed and transaction in Stock Exchange. At that time, this regulation was reasonable and understandable, because government just started to use capitalist economic system. But after almost 10 years, the government started to consider the transaction and liquidity of the state-own shares and private shares. Now the state-own shares and private shares already became a hidden trouble for China's stock market. The prices between the tradable share and non-tradable share are too different. Different shareholders have different opinion for equity division reform. If the equity division reform fail, China's securities will face with hot money and reform of companies equity.

On November 26<sup>th</sup>, 1990, the *Shanghai Stock Exchange* was founded and in operation on December 19<sup>th</sup> the same year.<sup>18</sup> It is a membership institution directly governed by China Securities Regulatory Commission (CSRC). The SSE bases its development on the principle of "legislation, supervision, self-regulation and standardization" to create a transparent, open, safe and efficient marketplace. The SSE

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<sup>18</sup> Reference : SSE Brief Introduction  
[http://www.sse.com.cn/sseportal/en/c01/c01/c01p996/c15010101\\_p996.shtml](http://www.sse.com.cn/sseportal/en/c01/c01/c01p996/c15010101_p996.shtml)

endeavors to realize a variety of functions: providing marketplace and facilities for the securities trading; formulating business rules; accepting and arranging listings; disseminating market information.

After several years' operation, the SSE has become the most preeminent stock market in Mainland China in terms of number of listed companies, number of shares listed, total market value, tradable market value, securities turnover in value, stock turnover in value and the T-bond turnover in value. December 2007 ended with over 71.30 million investors and 860 listed companies. The total market capitalization of SSE hit 26.98 trillion RMB. In 2007, capital raised from SSE market surpassed RMB 661.6 billion. A large number of companies from key industries, infrastructure and high-technology sectors have not only raise capital, but also improved their operation mechanism through listing on Shanghai Stock market.

### **3.2 Security Products and Index in Shanghai Stock Exchange**

There have a variety of stock exchanges around world. Different stock exchanges have different service and transaction. A mature Stock Exchange not only should take charge the transaction in Exchange, but also be responsible for stock market. Therefore, only comprehensive security products and appropriate information system could consist of good Stock Exchange.

#### **3.2.1 Security Products in Shanghai Stock Exchange**

As far as 2010, there have four securities listed on Shanghai Stock Exchange: *stocks, bonds, fund, warrants*.<sup>19</sup>

According to the market economy system of socialism with Chinese characteristics, the stocks in Chinese stock market are divided into two types: Class A Shares and Class B Shares. The Class A Shares limited to domestic investors as well as QFIIs only while Class B Shares available to both domestic and foreign investors.

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<sup>19</sup> Reference : Shanghai Stock Exchange  
[http://www.sse.com.cn/sseportal/en/c04p1101/c1504\\_p1101.shtml](http://www.sse.com.cn/sseportal/en/c04p1101/c1504_p1101.shtml)

*A shares* has two different meanings. Normally A share is a designation for a class of common or preferred stock which typically has enhanced voting rights or other benefits compared to other shares. But in China, A shares are those in Chinese companies issued in China under Chinese law. They are denominated in Chinese currency (RMB), and are listed on the Shanghai and Shenzhen Stock Exchanges. Until now, only Chinese citizens within China may trade the companies A shares listed in Shanghai and Shenzhen Stock Exchange.

*B shares* in China are foreign-invested shares issued domestically by Chinese companies. B shares are also known as RMB Special Shares. B shares are issued in the form of registered shares and carry a face value denominated in RMB. However, B shares are subscribed and traded in foreign currencies (US dollars) and listed and traded in both Shanghai and Shenzhen Stock Exchanges inside of Mainland of China. Both Chinese citizens and foreigners are allowed to invest in the B shares market.

On April 22 1998, Shanghai and Shenzhen Stock Exchanges announced that according to the stock listing rules, SSE and SZSE would start the special treatment to the stocks of listed companies with abnormal financial conditions, which implemented in 1998. Because the initials of “*Special Treatment*” are “*ST*”, so those listed shares are named ST shares<sup>20</sup>. ST shares above abnormal financial mainly refer to one of the following conditions:

- The net profits of listed companies were negative in two consecutive fiscal years;
- The per share net assets of listed companies in one recent fiscal year is lower than the face value of the share;
- There is no auditing report from an authorized account firm, or the accounting firm provided an auditing report that materially disagree with the financial statement of economic;
- Any abnormal financial behavior identified and claimed by CSRC or a Stock Exchange.

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<sup>20</sup> Reference : China Stock Market Handbook Editorial Board; *China Stock Market Handbook 2008*



In the special treatment period, the stock of the listed company should observe the following rules:

- The limit of the increase and decrease of ST shares quotation is 5%;
- Adding “ST” before the or original share name;
- A listed company’s interim report shall be audited.

The ST shares will be marked with \* to become \*ST share when a company failed to comply with certain rules posed by the exchange during the period of “Special Treatment”. A ST company would receive a delisting warning from the Stock Exchange if one of the following situation happens:

- The ST company can’t make itself profitable within a reasonable time period, after two years of consecutive loss;
- There is material mistake or fraud in the ST companies’ financial statement;
- The company doesn’t follow the law to timely file and disclose its financial statement.

In 1990, the first batch of 8 A shares was listed. As the time goes by and stock market becomes more and more mature, a large number of shares were listed on SSE. Lots of leading and high-quality enterprises was attracted by SSE. SSE has begun playing its role as a barometer of the national economy.

*Bonds trades*<sup>21</sup> on SSE include treasury bonds (T-Bonds), local government bonds, corporate bonds (including those approved by the State Development and Reform Commission), corporate bonds with detachable warrants, and convertible corporate bonds. In addition, securities investment funds (including Exchange Traded Fund-ETF) and warrants were available of trading on SSE. Until May 2012, there totally have 702 bonds, the market value of those bonds is 745.316 billion RMB. It’s included in 136 T-bonds, 60 local government bonds, 352 financial bonds and corporate bonds, 14 convertible corporate bonds, 125 company bonds and 15 detachable warrants.

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<sup>21</sup> Source: Shanghai Stock Exchange Bonds <http://www.sse.com.cn/sseportal/cn/zq/zq.shtml>

**Table 3.1 Information of Shanghai Stock Exchange 2012**

<b>Market Highlights</b>	
<b>Listed Companies</b>	940
<b>Listed Security</b>	1751
<b>Total Share Capital(100 million shares)</b>	23864.22
<b>Total Share Capital Tradable(100 million Shares)</b>	18305
<b>Total Market Capitalization(RMB 100 million)</b>	167759.26
<b>Total Free-float Capitalization(RMB 100 million)</b>	138697.21
<b>Average P/E Ratio</b>	13.08
<b>Ashare</b>	
<b>Total Market Capitalization(RMB 100 million)</b>	166965.74
<b>Total Free-float Capitalization(RMB 100 million)</b>	137903.69
<b>Total Turnover Volume(10,000 shares)</b>	1020117.08
<b>Total Turnover Value(RMB 10,000)</b>	10239724.81
<b>Total Number of Trades(10,000 deals)</b>	501.41
<b>Turnover Rate</b>	0.58
<b>Average P/E Ratio</b>	13.09
<b>B share</b>	
<b>Total Market Capitalization(RMB 100 million)</b>	793.51
<b>Total Free-float Capitalization(RMB 100 million)</b>	793.51
<b>Total Turnover Volume(10,000 shares)</b>	4432.32
<b>Total Turnover Value(RMB 10,000)</b>	26349.11
<b>Total Number of Trades(10,000 deals)</b>	2.11
<b>Turnover Rate</b>	0.33
<b>Average P/E Ratio</b>	12.65

Source: Shanghai Stock Exchange

As we can see from table 3.1, A shares is the main part of Shanghai Stock Exchange, and there almost have 18% shares is non-tradable share. But every year, government tries to encourage the companies which hold non-tradable shares to change it. Even though there still have huge number of non-tradable shares, they will general change to be tradable shares. But, it's not a short time to make the whole shares in China become tradable shares. Because if all of them become tradable in short period, the market can't take up such huge number of shares, and the different price will attract hot money.

### 3.2.2 Index in Shanghai Stock Exchange

In order to improve the fair of capital market transaction, the stock exchange has the responsibility to provide market information for investors and financial institution. The information include in stock index, statistics, regulation and transaction record.

As authoritative statistical indicators widely adopted by domestic and overseas investors in measuring the performance of Chinese security market, SSE indices are compiled and published by Shanghai Stock Exchange<sup>22</sup>. SSE indices are price indices including SSE 180 Index, SSE 50 Index, SSE Dividend Index, SSE New Composite Index, SSE Composite Index, Sector Indices, SSE Fund Index, SSE Government Bond Index and SSE Corporate Bond Index. Among them, the earliest one compiled was SSE Composite Index.

*SSE Composite Index* published from July 15, 1991 and widely used in China's Securities Market. It's the first Index that reflected the overall trend of market, also is the most influence Index in China Capital Market. Constituents for SSE Composite Index are all listed stocks (A shares and B shares) at Shanghai Stock Exchange. SSE Composite Index is based on a base period on a specific base day for the calculation. The base day for SSE Composite Index is December 19, 1990, and the base period is the total market capitalization of all stocks of that day. The Base Value is 100. The SSE Composite Index is the symbol of China's Capital Market, it stands for the development of China's Capital Market in this 20 years.

In June 2002 SSE 180 Index was published. SSE 180 Index selects 180 of the most representative stocks listed on SSE based on sector representation, size and liquidity. The SSE 180 reflect the overall situation and operation of Shanghai securities market and serve as performance benchmark as well as underlying instrument for financial derivatives.

*SSE 50 Index* selects 50 of the largest, highly liquid and most representative SSE-listed stocks from SSE 180. The SSE 50 reflects the performance of a number of

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<sup>22</sup> Source: SSE Indices Introduction  
[http://www.sse.com.cn/sseportal/en/c05/c01/c01p1034/c15050101\\_p1034.shtml](http://www.sse.com.cn/sseportal/en/c05/c01/c01p1034/c15050101_p1034.shtml)

leading and most influential enterprises in Shanghai securities market. It was published in January 2004.

SSE 380 Index was published in November 2010, it's mainly for emerging blue-chip stocks, reflecting the overall performance of non-traditional blue-chips stocks issued by companies characterized by moderate size, rapid growth and high profit. It's selects 380 companies which outside of the SSE 180 Index, excluding the losses and no dividends bonus shares in the past five years, and according to industry scale, liquidity, growth profitability ranking before the 380. The launch of SSE 380 index, SSE Mega-cap Index, SSE Small-cap Index, SSE Mid-cap Index, SSE Small- & Mid-cap Index, and SSE Large & Mid & Small Cap Index constitutes the SSE Market-size Index Series, along with the existing SSE 180 Index and SSE 50 Index. SSE 380 Index, SSE 180 Index and SSE 50 Index jointly make up of the main blue-chip stock index on the Shanghai Market.

**Table 3.2 Indices in Shanghai Stock Exchange**

Index Name	Shortened Form	Code	Launch Day	Base Day	Base Value
<b>Constituent Index</b>					
SSE 180 Index	SEE 180	000010	2002-7-1	2002-6-28	3299.06
SSE 50 Index	SSE 150	000016	2004-1-2	2003-12-31	1000
SSE Dividend Index	SSE Dividend	000015	2005-1-4	2004-12-31	1000
<b>Composite Index</b>					
SSE Composite Index	SSE Index	000001	1991-7-15	1990-12-19	100
SSE New Composite Index	New SSE Index	000017	2006-1-4	2005-12-30	1000
SSE A Share Index	A Share Index	000002	1992-2-21	1990-12-19	100
SSE B Share Index	B Share Index	000003	1992-8-17	1992-2-21	100
<b>Sector Index</b>					
SSE Industrial Index	Industrial Index	000004	1993-5-3	1993-4-30	1358.78
SSE Commercial Index	Commercial Index	000005	1993-5-3	1993-4-30	1358.78
SSE Real Estate Index	Real Estate Index	000006	1993-5-3	1993-4-30	1358.78
SSE Utilities Index	Utilities Index	000007	1993-5-3	1993-4-30	1358.78
SSE Conglomerates Index	Conglomerates Index	000008	1993-5-3	1993-4-30	1358.78
<b>Other</b>					
SSE Fund Index	Fund Index	000011	2000-6-9	2000-5-8	1000
SSE Government Bond Index	Government Bond Index	000012	2003-1-2	2002-12-31	100
SSE Corporate Bond Index	Corporate Bond Index	000013	2003-6-9	2002-12-31	100

Source: China's Stock Market Handbook

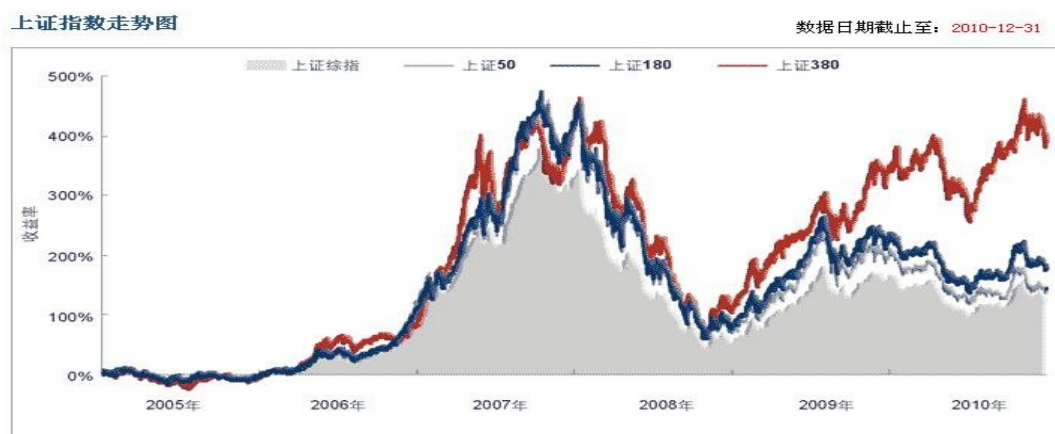
The SSE 50 Index and SSE 180 Index concentrate on finance、energy、raw material and industry those traditional industries, however SSE 380 is widely distribute on energy conservation、 high-technology、 biology、 high-tech equipment 、new energy resource、 new material and service those emerging industries. It shows the direction of China's economic restructure.

SSE Thematic Index Series currently comprises 21 indices, for example, SSE Dividend Index, SSE 180 Financial Index, SSE Corporate Governance Index, SSE 180 Corporate Governance Index, SSE 180 Infrastructure Index, SSE 180 Natural Resource Index, SSE 180 Transportation Index, SSE Social Responsibility Index, SSE Cyclical Industry 50 Index, SSE Non-cyclical Industry 100 Index, SSE Shanghai Enterprises Index, SSE Industry Top Index, SSE Overseas-listing A Share Index, SSE Central SOEs 50 Index, SSE Private Enterprises 50 Index, ect.

SSE Enterprise Bond 30 Index selects 30 of the high-quality, largest and most liquid enterprise bonds. It is China's first constituent bond index that is published on a real time basis and thus has profound significance for the development of the bond market.

SSE Fund Index reflects the overall of fund price change. The sample of SSE Fund Index is all funds which listed in Shanghai Stock Exchange.

**Chart 3.1 Trend of SSE Stock Index from 2005-2010**



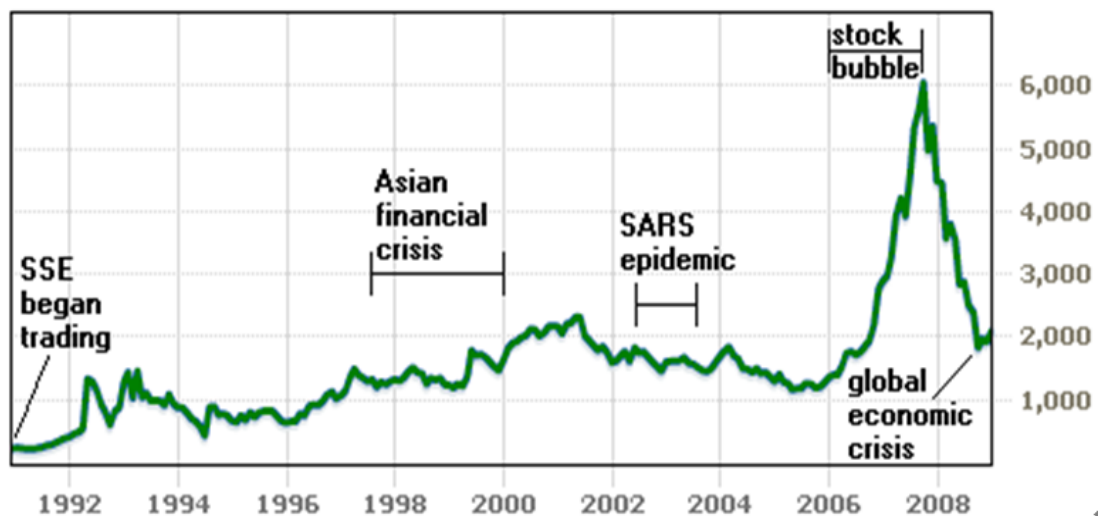
Shadow: SSE Composite Index, Grey: SSE 50, Blue: SSE 180, Red: SSE 380

Date deadline: 31.12.10

Source: Shanghai Stock Exchange

SSE Index Series measures the market trends in Shanghai securities market in general or from different dimensions and can reflect the performance and price movement of companies across a diverse range of industries. It offers investors different benchmarks for portfolio analysis. With the securities market set to play an increasingly important role in the national economy, SSE Indices will gradually become a barometer of the Chinese economy.<sup>23</sup>

**Chart 3.2 SSE Composite Index Chart from 1990-2009**



Source: History of Shanghai Stock Exchange

### 3.3 Structure and Transaction in Shanghai Stock Exchange

Stock Exchange is also an organization. No matter the non-profits or profit organization, all of good organizations need well-organized departments and reasonable rules. Stock Exchange is no exception.

#### 3.3.1 Structure of Organization in Shanghai Stock Exchange

The *structure of SSE*<sup>24</sup> is not complex. There have two highest authority of Shanghai Stock Exchange which is the Member Meeting and Board of Governors. Those authority acts as SSE decision making body. The Shanghai Stock Exchange has 22 departments and 2 fully owned subsidiaries.

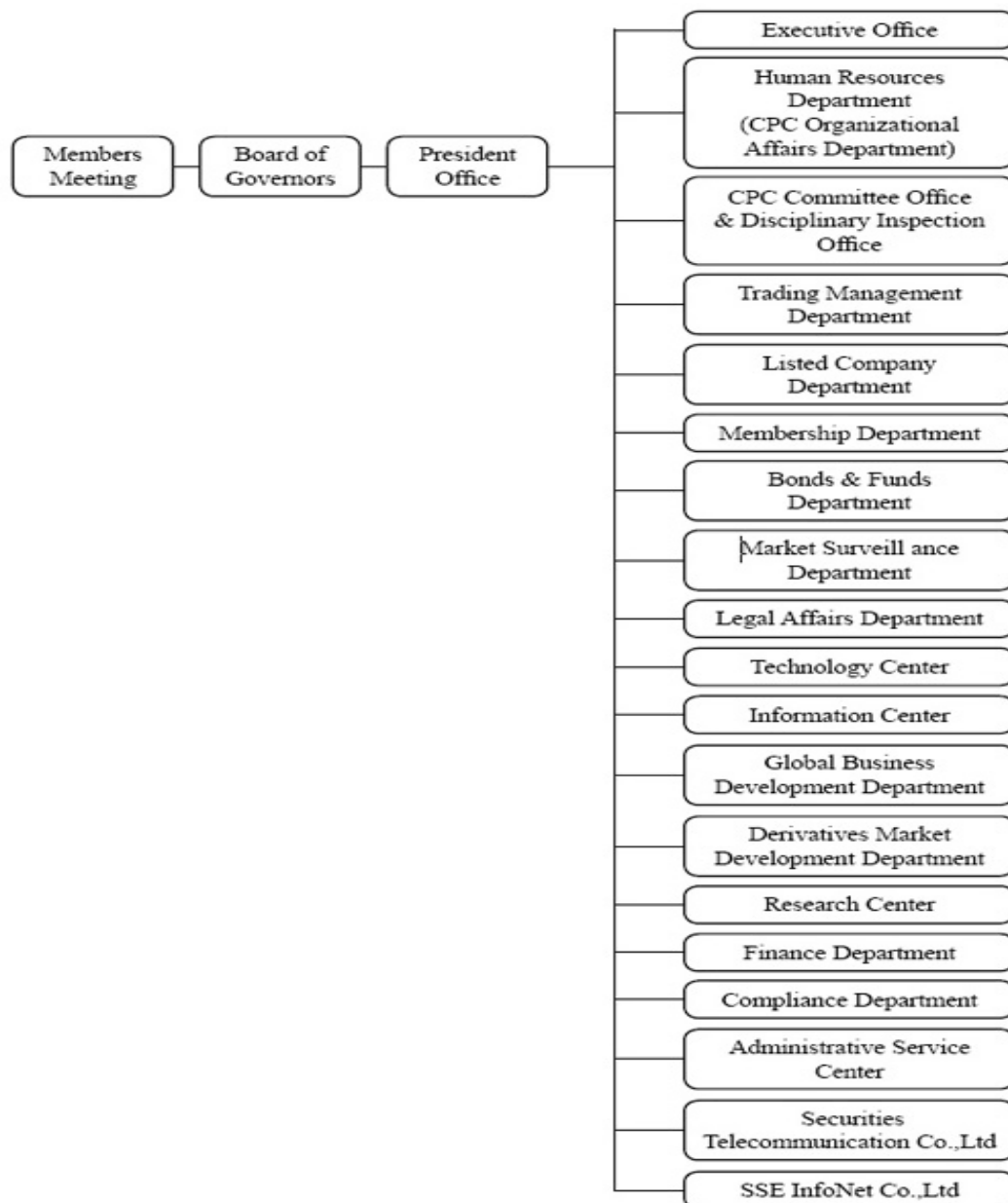
<sup>23</sup> Source: SSE Market Information <http://www.sse.com.cn>

<sup>24</sup> Source: SSE Organization Structure  
[http://www.sse.com.cn/sseportal/en/c01/c01/c03/p1000/c15010103\\_p1000.shtml](http://www.sse.com.cn/sseportal/en/c01/c01/c03/p1000/c15010103_p1000.shtml)

In those 22 departments and 2 fully owned subsidiaries, trading management department, listed company department, membership department, and bonds & funds department directly influence the transaction in Shanghai Stock Exchange.

Trading Management Department is in charge of organizing daily trading activities and of normal operation of the computerized trading system and related communication systems. It also provides relevant services to member organizations

**Table 3.3 Structure of Shanghai Stock Exchange<sup>25</sup>**



Source: Shanghai Stock Exchange

<sup>25</sup> Reference : SSE Overview Organizational Structure <http://www.sse.com.cn>

### **3.3.2 Transaction in Shanghai Stock Exchange<sup>26</sup>**

#### **Trade Seats**

Trading seats are divided into tangible seats and intangible seats according to the way offers are made. Trade seats that securities companies have in the SSE trading hall can make offers through their designated traders to the SSE and are called tangible seats. Securities companies can directly place orders to the SSE's mainframe computer through a front terminal and communication network located in their trading premises. These are called intangible seats.

#### **Trading Times**

Shares' centralized group auction is from 9.15am - 9.25am every Monday to Friday and consecutive bidding is carried out from 9.30am - 11.30am and 1.00pm - 3.00pm. The market is closed on Saturdays, Sundays and domestic public holidays.

#### **Modern Trading**

A modern trading system supports SSE's paperless trading at a highest speed of more than 8000 transactions per second. The orders are matched automatically by computer system according to the principle of "price and time priority".

Orders can be sent to the SSE's main framework through terminals either on the floor or from member firms. The SSE owns a huge 3600-square-meter trading floor, which is the largest one in Asia-Pacific area. In addition, the largest domestic satellite and optical communication network, which can disseminate the real-time transaction information to all the country and abroad, it connected the SSE with more than 5000 trading terminals.

#### **Clearing System**

The China Securities Central Clearing & Registration Corporation (CSCCRC) is responsible for the central depository, registration and clearing of the securities. It carries out the T+1 settlement for A shares and T+3 for B shares.

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<sup>26</sup> Source; SSE Trading & Clearing System [http://www.sse.com.cn/sseportal/en\\_us/ps/about/tcs.shtml](http://www.sse.com.cn/sseportal/en_us/ps/about/tcs.shtml)



**Table 3.4 Transaction Information of Shanghai Stock Exchange**

<b>Trading Information</b>		
<b>Type of Securities Traded</b>	<b>Name of Trading System</b>	<b>Trading Hours</b>
Stock , Fund, Bond	NGTS	9:30-11:30 ; 13:00-15:00
<b>Supervisory Body</b>	<b>Name of Clearing &amp; Settlement Organization</b>	<b>Settlement Cycle</b>
China Securities Regulatory Commission	China Securities Depository and Clearing Corp.Ltd Shanghai Branch	T+1 for A Shares T+3 for B Shares

Source: WFE <http://www.world-exchanges.org/member-exchanges/>

### 3.4 Listed Companies in Shanghai Stock Exchange

China's listed company has different history and culture with other countries. In the begun those listed companies took on some kind of political duty. In order to steady the leader position of public ownership, China has a special structure of share: state-own shares, private shares and public share. At those shares' proportion, the state-own shares have the leader and control position.<sup>27</sup>

But follow China's economy development, the number of listed companies increased a lot. The stock market became more and more important financing way for company's development.

In this table we can see that from 1990 to 2010, the number of listed companies changed from 8 to 894. It's increase 11075%. And according to the industry, the number of Industrial and Conglomerates listed companies increased more than other industries. According to the increasing year-to-year, from 1995 to 1996 the number of listed companies increased most. It increased 105 listed companies in one year.

According to this table, it's clearly to see that the number of listed securities, proceeds raised, share capital issued and market cap were increasing a lot from 1990 to 2010. This booming of listed company not only shows the China's economy development, but also expresses the Stock Exchange's contribution for economy.

<sup>27</sup> Source: SSE Listed Company [http://www.sse.com.cn/sseportal/en/c03/p1274/c1503\\_p1274.shtml](http://www.sse.com.cn/sseportal/en/c03/p1274/c1503_p1274.shtml)

**Table 3.5 Number and Sector Distribution of Listed Companies in SSE  
(1991-2010)**

<b>Year</b>	<b>Industrial</b>	<b>Commercial</b>	<b>Real Estate</b>	<b>Public Utilities</b>	<b>Conglomerates</b>	<b>Total</b>
<b>1991</b>	3	2	0	0	3	8
<b>1992</b>	20	3	1	1	4	29
<b>1993</b>	63	14	8	11	10	106
<b>1994</b>	93	34	9	15	20	171
<b>1995</b>	109	34	9	12	24	188
<b>1996</b>	164	46	9	22	52	293
<b>1997</b>	218	50	9	33	73	383
<b>1998</b>	257	49	9	38	85	438
<b>1999</b>	291	49	9	39	96	484
<b>2000</b>	347	54	9	50	112	572
<b>2001</b>	402	56	13	59	116	646
<b>2002</b>	451	60	15	67	122	715
<b>2003</b>	505	60	15	72	128	780
<b>2004</b>	546	59	17	82	133	837
<b>2005</b>	544	58	17	83	132	834
<b>2006</b>	544	58	19	88	133	842
<b>2007</b>	545	58	24	90	143	860
<b>2008</b>	547	58	24	91	144	864
<b>2009</b>	549	57	25	91	148	870
<b>2010</b>	559	57	25	93	160	894

Source: Shanghai Stock Exchange

According to the regulations of the “Securities Law of the People’s Republic of China” and “Company Law of the People’s Republic of China”, limited companies applying for the listing of shares must meet the following conditions:

- The shares must have been publicly issued following approval of the State Council Securities Management Department;
- The company’s total share capital must not be less than RMB 50 million;
- The company must have been in business for more than 3 years and have main profits over the last three consecutive years. In the case of former state-owned enterprises re-established according to the law or founded after implementation of the law and if their issuers are large and medium state owned enterprises, it can be calculated consecutively. The number of shareholders with holdings of values

reaching in excess of RMB 1,000 must not be less than 1,000 persons. Publicly offered shares must be more than 25% of the company's total share capital. For company's whose total share capital exceeds RMB 400 million, the ratio of publicly offered shares must be more than 15%;

- The company must not have been guilty of any major illegal activities or false accounting records in the last three years;
- Other conditions stipulated by the State Council.

**Table 3.6 Number of Listings Companies in SSE (1990-2010)**

Year	Number of Listed Companies	Number of Listed Securities	Proceeds Raised (RMB 100 million)	Share Capital Issued (100 million shares)	Market Cap (RMB 100 million)
1990	8	30	10.11	2.61	12.34
1991	8	46	0.24	2.72	29.43
1992	29	87	41.39	46.94	558.4
1993	106	190	93.47	235.54	2206.2
1994	171	259	150.82	418.88	2600.13
1995	188	258	58.16	560.66	2525.66
1996	293	368	202.22	749.86	5477.81
1997	383	467	474.6	975.37	9218.06
1998	438	526	377.15	1280.35	10625.9
1999	484	576	486.37	1580.15	14580.47
2000	572	657	914.32	2032.42	26930.86
2001	646	744	957.49	3164.44	27590.56
2002	715	826	614.3	3727.84	25363.72
2003	780	914	560.96	4170.39	29804.92
2004	837	996	456.9	4700.55	26014.34
2005	834	1069	299.77	5023.05	23096.13
2006	842	1126	1714.41	10279.54	71612.38
2007	860	1125	6701.33	14173.1	269838.87
2008	864	1184	2238.16	15410.39	97251.91
2009	870	1351	3343.15	16659.96	184655.23
2010	894	1500	5532.14	21939.51	179007.24

Source: Shanghai Stock Exchange

According to the table 3.6, before 2003, the increasing of number listed companies is very obviously. After 2003, the increasing of number of listed companies become stability. The market capitalization is changeable between 1999-2000, 2006-2007 and

2007-2008. In 1990-2000, the market capitalization was increased very quickly. It's because of the bubble of high-tech stock market. Second changeable period is 2006-2007, it's the period of bull markets in all over the world. After the bull market, in 2007-2008, the decreasing of market capitalization is because of the global economic crisis.

### **3.5 Regulation and Supervision for Shanghai Stock Exchange**

China's security market supervision system experience 3 processes: separation, multiple management and centralized and unified management. *Special after 1997, the China Security Regulatory Commission was established*, the market scale was enlarged and the regulation become more and more completely. Authorized by the State Council, in accordance with relevant laws and regulations, the China Securities Regulatory Commission, a ministry-level unit directly under the State Council, regulates China's securities and futures markets with an aim to ensure their orderly and legitimate operation.

The commission consisted of 18 departments, a general force of enforcement, 3 centers and a public offering view committee consisting of professional and experts both inside and outside. It set up 36 regional bureaus throughout the country in provinces, autonomous regions, municipalities directly under the central government, and cities under separate state planning, as well as 3 offices for securities regulation in Shanghai and Shenzhen. The maintenance of a fair and efficient market is their unshakable responsibility.

In China's security market and Shanghai Stock Exchange, there have sever law and regulations: Companies Law of the People's Republic of China; Law of People's Republic of China on Securities; Trading Rules of Shanghai Stock Exchange; Rules Governing the Listing of Stocks on Shanghai Stock Exchange; Provisional Measures on the Administration of the Domestic Securities Investment of Qualified Foreign Institutional Investors.

With the marketization process of China's security market, the principle of China Security Regulatory Commission also has huge transform. They changed from control

market risk to follow market law and announce risk.

But until now, there still has lots of substandard phenomenon. Fraudulent listing, financial fraud, insider trading and malicious trading those illegal behavior always happen, it show that the regulation and supervision level for China's security market still need improvement. The regulatory commission should have widely view for security market development and regulation.

### **3.6 Internationalization Level of Shanghai Stock Exchange**

General to say, China's securities market is closed. But China always try to follow the reform and open policy and contract with international finance market. Specially after China joined in WTO.

The first period of China open securities marker was in 1990's, in order to raise foreign capital for state-owned companies, China's securities market first open to foreign country. In 1992, Class B shares market was established. In 1993, government started allow part of state-owned companies listed in abroad, for instance the H shares, N shares and S shares and so on. But nowadays, the Class B shares market almost stop, more and more Chinese companies start to go public or listed in abroad.

The second period of China open securities market started when China joined in WTO. The process of open securities market for foreign country became more quick and wide, there also have some reform for internationalization. In this period, China's securities market opened in three levels: firstly allow sino-foreign joint venture listed in A shares market; secondly, open part of security service in the form of joint venture or cooperation; thirdly, A shares market start to implement QDII system.[Xie,2003]

### **3.7 Function and Contribution for China Development**

As a important part of China's economy, Shanghai Stock Exchange has its own function rather than other depaertment in China. On the one hand, it's a department which has the capitalism nature. However, it also belong to socialist development and help individual and group to find their way to development. On the other hand, Shanghai Stock Exchange develop its own character for international communication.

- Help china's market economic development and innovation;
- Providing new way for company financing;
- Increasing fiscal revenue for Government;
- Providing investment opportunity for individual investor;
- Help China connect with international finance market.

### **3.7.1 Help China's Market Economic Development and Innovation**

China is a socialist country, from 1949 to 1978, any kind of capital things were forbidden. Third Plenary Session of the Eleventh Central Committee in 1978, China decided to change the foreign policy: the policy of reformation and opening. After that, China accepted lots of economic institutions of capitalism. Stock Exchange is one of important products from capitalism. Before the Shanghai Stock Exchange established, in China there only have few joint-stock company. In 1990, the Shanghai Stock Exchange only have 8 A shares, lots of people scared and didn't know about stock, until 1992, premier Deng made a presentation show that government really admit and encourage stock this kind of capitalism product. After 1992, china stock market has a very great development. The Shanghai Stock Exchange helps China's market economic became more completed. And it also helps the capital became more efficient. With the market completed and economy developed, securities market started need some reform and innovation.

### **3.7.2 Providing New Way for Company Financing**

Before the Shanghai Stock Exchange established, when state-owned company needed capital, there always had two ways: bank loan and government grant. But this financing model is only available for big state-owned company and it decreased company's competitive power. But in the 1990's the state-owned companies still have large demand of capital. In this background, Shanghai Stock Exchange establishes. It provided a new way for company financing. With the economy development, listed on Stock Exchange became a normal and efficient financing way. The listed companies could get money by issuing securities, but at same time they also need improve

themselves and maintain a good development.

### **3.7.3 Increasing Fiscal Revenue**

A “stamp duty<sup>28</sup>” or “stamp tax” is an archaic form of tax which is basically a prerequisite for a document to become legally binding. With the development of securities market, China started to levy stamp duty on stock market in 1990. At stamp duty was designed to curb extremely bullish trading, and then it became an important part of Government Revenue. Between 1991 and 1997, a stamp duty of 0.3% of the value of share traded was levied on both the buyer and seller of A shares. Both local and central government benefited. In May 1997 the stamp duty was raised to 0.5%. in June 1998, it dropped to 0.4% and then in November 2001 the CSRC cut the stamp duty from 0.4% to 0.2% for A shares. Initially, local government took all of Stamp Duty but central government has gradually seized an increasing proportion, the proportion for central and government was changed from 50%:50% to 97%:3%.

According to the "Notice of Adjusting Stamp Duty Rate for Securities (Stock) Transfer" of the Ministry of Finance and the State Administration of Taxation, each party to a transfer deed on purchase, sale, inheriting and gifting of A or B shares shall be subject to a 1‰ stamp duty rate for securities (stock) transfer on or after April 24, 2008. This reform about stamp duty system helps China's stock market increasing in a period. Because of the lower stamp duty rate, trading in the financial market became more active and contributed additional government revenue from stamp duty and other tax. And every moves of stamp duty was motivated by a desire to effect a change in investor sentiment.

As we can see from the table 3.7, at a certain extent the stamp duty ratio of revenue was impacted by stock market situation. In 2000 and 2007, the ratio of revenue is higher than 4%, at that time the stock market was in a Bull market, but only the market capitalization of Shanghai Stock Exchange is very high, the turnover rate is also really high. Huge volume of transaction provides lots of income for revenue.

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<sup>28</sup> Source : Stamp Duty <http://www.chinatax.gov.cn/n8136506/index.html>

**Table 3.7 Stamp Duty in China's Revenues (1994-2009)**

Year	Revenues(hundred million RMB)	Stamp Duty(hundred million RMB)	Ratio of Revenue(%)
1994	5070.8	61.8	1.218742605
1995	5973.7	46.8	0.783434053
1996	7050.6	146.7	2.080673985
1997	8225.5	266.3	3.237493162
1998	9093	238.5	2.622896734
1999	10315	282.3	2.736791081
2000	12665.8	521.9	4.12054509
2001	15165.5	337	2.222148957
2002	16996.6	179.4	1.055505219
2003	20466.1	215	1.050517685
2004	25718	290.2	1.128392566
2005	30865.8	226.7	0.734469866
2006	37636.3	376.5	1.00036401
2007	49449.3	2261.7	4.573775564
2008(Feb-Sep)	46058.9	937.7	2.03587146
2009	63104	514	0.814528398

Source: China's Administration of Taxation

#### **3.7.4 Providing Investment Opportunity for Individual Investors**

As opposed to other businesses that require huge capital outlay, investing in shares is open to both the large and small stock investors because a person buys the number of shares that can afford. Therefore the stock exchange provides the opportunity for small investors to own shares of the same companies as large investors.

Opening a personal new account in Shanghai Stock Exchange just need 40 RMB. This low level for entering A shares markets attracts lots of Chinese participate in stock market. As the stock markets in China have 28 years history. However, many medium and small investors don't know about stock and investment. The first big increasing of number of medium and small investors was in 1996, the booming stock market attract lots of people. However, in China, most of medium and small investors just expect low risk with high return, they don't have their own principle of investment and blind follow the financial institutions or market makes. The result is that lots of speculation exists in China's Stock market.



**Table 3.8 Number of Accounts in Shanghai Stock Exchange (1991-2010)<sup>29</sup>**

Year	Number of Accounts (10,000)	Year	Number of Accounts (10,000)
1991	11	2001	3430
1992	111	2002	3556
1993	424	2003	3644
1994	575	2004	3787
1995	685	2005	3856
1996	1208	2006	4101
1997	1713	2007	7131
1998	1999	2008	7973
1999	2272	2009	8965
2000	2940	2010	9851

Source: Shanghai Stock Exchange Fact Book

### 3.7.5 Help China Connect with International Finance

Careful liberalization would undoubtedly deepen and improve the efficiency of China's stock market, even though the risk is also involved. B shares were designed for foreign investors, but after 2000 the B shares market was developed slowly.

China joined in WTO in 2001, China's government promised that China will follow the Opening and Reform Policy and try to make China's market more opening. One of the promises from Government is that the China's Government promise to improve China's finance market completion and internationalization. China's Government started to allow foreign fund enter China's A shares market in 2003. After 2003, more and more QFII (Qualified Foreign Institutional Investor) start their investment in China. The QFII could bring sever benefits for China's stock market. Normally the foreign institution has their own principle of invest, their mature and normative investing behavior could lead stock market to rational invest. It's also could help China's stock market face with foreign institutional investors directly, it could improve China stock market's internationalization.

In 2002, the Shanghai Stock Exchange has been accepted as a member of the World Federation of Exchange, and the successful campaign in 2006 to the Board. As of

<sup>29</sup> Source: Shanghai Stock Exchange Face Book 2011

November 2010, the Shanghai and Shenzhen Stock Exchange and nearly 40 exchanges around the world signed a Memorandum of Understanding. The New York Stock Exchange, London Stock Exchange and the Tokyo Stock Exchange, the world's major exchanges were carried out with the Shanghai Stock Exchange, the Shenzhen Stock Exchange, including the information, products, personnel training, including various forms of exchange and cooperation, effectively increasing the Shanghai Shenzhen Stock Exchange in the international capital market influence.

**Table 3.9 SSE Membership in International Organization**

No.	Organizations	Date	Membership
1	International Organization of Securities Commissions (IOSCO)	1996.9	Affiliate Member
2	Asian and Oceanian Stock Exchanges Federation (AOSEF)	2000.4	Member
3	World Federation of Exchanges (WFE)	2002.10	Member

Source: Shanghai Stock Exchange

### 3.8 Disadvantages of Shanghai Stock Exchange

After 22 years development, Shanghai Stock Exchange already become very important in world stock market. In 2010, the Shanghai Stock Exchange's trading volumes is the third largest all over the world. However, because of China's complexity of national conditions, Shanghai Stock Exchange still has lots of disadvantages for its future development<sup>30</sup>:

- Inadequate Supervision;
- The unsolved situation for non-tradable shares;
- Lack of Internationalization.

#### 3.8.1 Inadequate Supervision

After Shanghai Stock Exchange start the transaction, there already had lots of company's scandal in stock market. First scandal took place in 1992, the reason is financial cheat. After that, almost every year, there will have some companies was reported that their high market price have problems. In another word, it because of

<sup>30</sup> Source: Improving China's Securities Market  
<http://china.findlaw.cn/falvchangshi/zhengquan/zhengquanshichangjanguan/zgzjscjg/26483.html>

China's inadequate supervision. For China's stock market future development, it's necessary to Establish the concept of information-driven and transaction-driven market surveillance, and improve the rules of monitoring the monitor means, and strengthen market supervision and enforceable. Strengthen securities irregularities supervision, to crack down on insider trading, market manipulation and other violations, to ensure the orderly operation of markets.

### **3.8.2 The Unsolved Situation for Non-tradable Shares**

The split share structure is a phenomenon unique to China's stock market, also known as the equity split is part of the listed company's shares traded, another part of the shares traded. The former is mainly known as the outstanding shares of the main component of the public shares; the latter non-tradable shares, mostly state-owned shares and legal person shares.

But in this special share structure, China's stock market faces with huge hidden trouble. On the one hand, Mergers and acquisitions in stock market can't show the supervision role because the shares are not all of the outstanding. The listed companies can't face real competition in the market. On the other hand, too concentrated share structure make big shareholders can easily harm the profits of small shareholders.

### **3.8.3 Lack of Internationalization**

According to China's Special national condition, China's stock market only provides sever of way for foreign investors and foreign institution investors. On the other hand, the China's currency is not international currency and China's government control the foreign currency, so the security trade for foreign investor is more complexity.

Nowadays, foreign company still can't list in Shanghai Stock Exchange, and foreign investor can only invest in B shares market, sever of big foreign institutions could through QFII to invest in China's A share market. But Shanghai Stock Exchange is planning for international board.

### **3.9 Development and Future of Shanghai Stock Exchange**

The stock market is the basis for the development of the Shanghai Stock Exchange, to further strengthen the motherboard market position to create a blue-chip market. The bond market has enormous potential, the Shanghai Stock Exchange to the continuous improvement of the infrastructure and market system, building an independent, efficient, multi-functional bond market system. Market demand build the fund market, the steady development of the derivatives market, and strive to enhance the core competitiveness of the Shanghai Stock Exchange Market.

The next decade, the Shanghai Stock Exchange ushered in a great growth opportunity at the same time, also faced with many challenges. First, accelerate the transformation of China's economic development mode, the national economic structure is being ushered in a strategic adjustment, the Shanghai Stock Exchange market structure could be improved. The second is the emerging and transitional phase characteristics of the Chinese capital market is still prominent, and the Shanghai Stock Exchange market environment and institutional environment is yet to be perfected. Third, the world's major exchanges continue to increase efforts to market expansion, product innovation and merger and acquisition, the Shanghai Stock Exchange is facing an increasingly competitive environment. Governance mechanisms, organizational structure, sense of innovation and service concept, the Shanghai Stock Exchange has not yet formed their own core competitiveness, there is a big gap compared with world-class Exchange.

## **4 Description of the Function of the New York Stock Exchange**

New York Stock Exchange, the largest stock exchange in the world. It spend almost 300 years on its development, time bring the mature market and complete product to him. As an important part of international finance, it could give us lots of experiences and lessons.

### **4.1 History of New York Stock Exchange**

Strictly speaking, American stock market already has 300 years history. The original security transaction was part of commodity transaction. In the begun of 18<sup>th</sup> Century, a commodity auction market was established near the Wall Street, those auction commodity include in wheat, tobacco and few varied securities, even the slave trade. When the U.S. government issued \$80 million in bonds to pay off its Revolutionary War debt, the bond market was born. Because at that time there didn't have uniform trading market, most of those bonds transactions was finished in coffee shop or commodity auction markets. When the bond market became more and more huge and booming, the brokers decided to separate the bonds transaction from commodity transaction and establish a security transaction organization.

So the New York Stock Exchange history all starts in 1792 that was when 24 New York Stock Brokers and Merchants signed the *Buttonwood Agreement* creating the New York Stock & Exchange<sup>31</sup>. On May 17, 1792, twenty-four stockbrokers gathered outside 68 Wall Street under a buttonwood tree to sign an agreement that would establish the rules for buying and selling bonds and shares of companies. The Buttonwood Agreement, as it is known, is so named because the tree served as the regular meeting place for these pioneers of Wall Street. The signers of the Buttonwood Agreement drafted their first constitution on March 8th, 1817, and named their nascent organization the New York Stock & Exchange Board. In 1863, this name was shortened to its modern form, the New York Stock Exchange, which became known as the NYSE, one of the best-known financial industry brands in the world.

The New York Stock and Exchange rented a place at 40 Wall Street, in 1817, for

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<sup>31</sup> Reference : New York Stock Exchange <http://www.u-s-history.com/pages/h1806.html>

only \$200 a month. The location served them well for almost 20 years, but as destroyed in New York's Great Fire in 1835. In 1865, the Exchange moved to 10–12 Broad Street. The New York Stock Exchange was closed for ten days starting September 20, 1873, because of the Panic of 1873. As the 20th Century dawned, the NYSE was firmly established as one of America's outstanding financial institutions. It was also experiencing a sustained rise in trading volume. Trading in listed stocks tripled between 1896 and 1899.<sup>32</sup>

The volume of stocks traded increased sixfold in the years between 1896 and 1901, and a larger space was required to conduct business in the expanding marketplace. So the Exchange invited eight of New York City's leading architects to join in a competition to design a grand new building. Their instructions: The trading floor was to have more space, more light, and more convenience for the transaction of business. The Exchange chose the neoclassic design of architect George B. Post. The new Exchange building at 18 Broad Street opened on April 22, 1903 to fanfare and festivity. The Exchange building is considered one of Post's masterpieces and is a national landmark.

In 1849, the gold rush in the western United States brought the U.S. securities industry a huge booming development, stock exchange established in major of American cities, total more than 200 stock exchanges was established in those years. At that time, the security market was not standardized and risky, lots of local stock exchange went bankrupt in short period. But *it established the New York Stock Exchange was the centre of American security market*. With the development of the capitalist economy in America, the stock market also developed in same time. In 60 and 70 of 19th century, it is in the time of laissez-faire capitalism to monopoly capitalism. Characterized by railway, oil, auto, chemistry and finance those industry's big companies move to monopoly, large-scale capital formation became very important for this transient period.

After the First World War, *American's economy was booming*. The increasing of economy brought a large number securities was issued, but it also brought the overheating economy and bank credit abuse in whole 1920's. The security market and

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<sup>32</sup> Reference : NYSE & Euronext About NYSE <http://www.nyse.com/>

transactions became more and more active without a Federal Government Supervision. However, since 5th Sep of 1929, the stock market was first decreasing in those months that continue increasing. On 24th October of 1929, the stock price was slump. This one-day collapse in stock prices was a virtual impossibility. On 29<sup>th</sup> October, Dow Jones Index decreased 60 points in one day, and in November the cumulative decline in Dow Jones Index up to 44.69%. The carnage spilled into the US banking industry where banks lost heavily on proprietary stock investments. Fearing that banks would be unable to repay money in their accounts, depositors staged a "run" on banks. Thousands of US banks failed. Between May of 1930 to January of 1932, the stock market experienced six time drop sharply, Dow Jones Index drop in the lowest 41 point on 8<sup>th</sup> July of 1932.

From 1<sup>st</sup> September of 1929 to 1<sup>st</sup> July of 1932, the total of stock-market capitalization which listed on New York Stock Exchange was decreased from 90 billion to 16 billion, it fall almost 82.22% stock- market capitalization. This stock market crash shocked the Federal Government of the United States, completed defeated the confidence of investors. But this stock market crash promoted American security market strengthens their unified supervision.

**Chart 4.1 Dow Jones Industrial Average: 1929**



During October 1929, the US stock market crashed.

Source: History of New York Stock Exchange

The 1929 Stock Market Crash<sup>33</sup> resulted in global economic crisis. British, France and Germany those West Developed countries all fell into serious economic recession, they has forced to abandon the Gold Standard. After the economic crisis, United States

<sup>33</sup> Reference : <http://www.stocks-simplified.com/NYSE-History.html>

Federal Government set up sever financial law which included in security market management, and start to strengthen their supervision for security market.

The stock market crash was over, and the Great Depression had begun. During this period, the US Congress passed legislation designed to prevent abuses of the securities markets and to restore investors' confidence. The 1933 Banking Act combined a bill sponsored by Representative Steagall to establishing federal deposit insurance with a bill sponsored by Senator Glass to segregate the banking and securities industries. More commonly known as the Glass-Steagal Act<sup>34</sup>, it distinguished between:

- Commercial banking, which is the business of taking deposits and making loans;
- Investment banking, which is the business of underwriting and dealing in securities.

All banks were required to select one of the two roles and divest businesses relating to the other. Chase National Bank and the National City Bank both dissolved their securities businesses. Lehman Brothers dissolved its depository business. The First Bank of Boston split off its securities business to form First Boston. JP Morgan elected to be a commercial bank, but a number of managers departed to form the investment bank Morgan Stanley. This Banking Act decreased the risk in whole security market, but it also made the limit for security market development.

Two other acts addressed the securities markets. The 1933 Securities Act focused on primary markets, ensuring disclosure of pertinent information relating to publicly offered securities. The 1934 Securities Exchange Act focused on secondary markets, ensuring that parties who trade securities—exchanges, brokers and dealers—act in the best interests of investors. Certain securities—including US Treasury and municipal debt—were exempted from most of these acts' provisions.

The Securities Exchange Act established the *Securities and Exchange Commission (SEC)* as the primary regulator of US securities markets. In this role, the SEC gained regulatory authority over securities firms. Called broker-dealers in US legislation, these include investment banks as well as non-banks that broker and/or deal non-exempt securities. The 1938 Maloney Act clarified this role, providing for self regulating

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<sup>34</sup> Glass-Steagal-Act : [http://www.investopedia.com/terms/g/glass\\_steagal\\_act.asp#axzz1wmlGbLJD](http://www.investopedia.com/terms/g/glass_steagal_act.asp#axzz1wmlGbLJD)



organizations (SRO's) to provide direct oversight of securities firms under the supervision of the SEC.

In 1938, the Securities Exchange Act was modified to allow the SEC to impose its own capital requirements on securities firms, so the SEC started to develop a Net Capital Rule. Its primary purpose was to protect investors who left funds or securities on deposit with a securities firm. In 1944, the SEC exempted from this capital rule any firm whose SRO imposed more comprehensive capital requirements. Capital requirements the NYSE imposed on member firms were deemed to meet this criteria.

Mutual funds, and especially closed-end mutual funds, were hit hard in the 1929 crash. A number of abuses came to light—some closed-end funds had been little more than Ponzi schemes—prompting Congress to pass the 1940 Investment Company Act regulating mutual funds. With a few exceptions—which encompass most of today's hedge funds—this granted the SEC regulatory authority over investment companies. Congress also passed the 1940 Investment Advisers Act, regulating the relationship between mutual funds and their investment managers.

Those Act made security market's original blank law areas became the most serious financial law areas, the security was supervision by Security and Exchange Commission. At that time, in a global view, the Bretton Woods System was established in 1944, this system strengthen the position of United States in the international financial and security market. American security market got a huge development.

In 1973, the *Bretton Woods System crashed*, most West countries start to implement flow exchange rate. And in 1970's the international capital was frequently moving, price of oil and dollar are changeable, the international financial exchange rate, interest rate and inflation rate became more and more changeable. In this situation and environment, the Security Exchange Commission's supervision was considered over the line. Some investors and scholars think this kind of over supervision is not good for financial institution and financial system, it ruin the efficiency and development for American's finance and economy. According to this background, financial derivative market starts their history and stage. Forward agreement, future and options became part of financial market. In the end of 1970's, the financial system experienced a change process of

structure which because of innovation. Because of this structure changing, investors prefer to a positive expectation for stock market.

In the end of 20<sup>th</sup> century, the high-technology industry was booming. High expectation for high-technology's growth and profits attracted more international capital flowed in American stock market. The stock market bubble quietly formation. Extreme joy begets sorrow, started from the begun of 2000, America stock market began appear to large fluctuations. NASDAQ Composite Index drop from 5130 points to 1200 points, in March of 2003 the NASDAQ Composite Index was 1300 points, the cumulative decline in NASDAQ Index up to 78%. The Dow Jones Index also decreased from 11000 points to 7500 points, the stock market capitalization decreased 30%. Following the high-technology bubble burst, 911 event, Enron Event and fraudulent account of WorldCom Inc and war with Iraq made American stock market entered into a decreasing time.

Congress passed the 2002 Sarbanes-Oxley Act, known as "SOX." This increased corporate executives' accountability, mandated a variety of internal controls at firms, and strengthens the role of auditors. Accounting firms were largely prohibited from simultaneously auditing and consulting to any given client. Six years after Congress passed SOX, the US financial system was wracked by a crisis worse than anything since 1929. Contagion spread around the world. The underlying causes were years of easy money policies by the Fed, which encouraged excessive borrowing and produced asset bubbles in real estate, commodities and equities, and a hands-off approach to regulation. Not only had depression-era financial reforms been dismantled, but rules that remained on the books were not uniformly enforced. The immediate cause was subprime mortgage debt. *The mortgage-backed securities (MBSs)*<sup>35</sup> market was originated in 1980s. By providing a marketplace for mortgage originators to sell off mortgages, it allowed those originators to earn fee income from mortgages without tying up their capital or taking the risk associated with keeping those mortgages on their balance sheets. Investment banks earned fees structuring the MBSs.

Things started to turn bad in 2006. Home prices peaked and then plunged. Subprime

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<sup>35</sup> MBSs: <http://www.investopedia.com/terms/m/mbs.asp#axzz1wmlGbLJD>

delinquency rates rose. Both trends accelerated in 2007. With MBS prices dropping, credit rating agencies downgraded hundreds of issues. Mortgage originators New Century Financial and American Home Mortgage Investment both filed for bankruptcy protection. Bear Stearns was forced to liquidate two hedge funds that invested in mortgage-backed securities. In 2008, several large financial institutions had to seek rescues to avoid failing. Bear Stearns was acquired by JPMorgan Chase. Countrywide Financial was acquired by Bank of America. Fannie Mae and Freddie Mac were both placed in government conservatorship. Merrill Lynch was acquired by Bank of America. Lehman Brothers could not find a rescuer and filed for bankruptcy protection on September 15, 2008. The Dow Jones Industrial Average (DJIA) had been extremely volatile. It was already down 2,743 points from its high almost a year earlier of 14,165. The day Lehman Brothers failed, it plunged another 504 points. United States Federal Government already did lots of Bailout Plan for security market and economy, but we still in this economy crisis.

In those 300 years history, even though the NYSE wasn't appear so frequently, but its function and meaning is grand. Today, the New York Stock Exchange (NYSE) is the second largest stock exchange in the world. Leading up to 1996, it was the biggest exchange until its trading volume was exceeded by that of National Association of Securities Dealers Automated Quotations (NASDAQ). The NYSE is now a for-profit business. The transformation into a for-profit organization occurred when the fully electronic stock exchange Archipelago merged in late April of 2005.

NYSE Euronext, the holding company created by the combination of NYSE Group, Inc. and Euronext N.V., was launched on April 4, 2007. NYSE Euronext is a leading global operator of financial markets and a provider of innovative trading technologies is the only exchange operator in the Fortune 500. With exchanges in the US and Europe, NYSE Euronext equities marketplaces represent one-third of equities trading worldwide. NYSE Euronext is also one of the world's leading futures and options trading venues, with four markets based in the US and Europe offering derivatives on commodities, FX, equities, bonds, interest rates, indices and swaps. Because lots of Chinese companies listed in New York Stock Exchange, so in this thesis I separate NYSE from NYX.

## **4.2 Securities Products and Index in New York Stock Exchange**

New York Stock Exchange is the biggest stock exchange in the world. Now the NYSE is operated by NYSE Euronext, which was formed by the NYSE's 2007 merger with the fully electronic stock exchange Euronext. But it doesn't change the position of NYSE in the world. As the biggest Stock Exchange, NYSE has more complete products and services. To know about it is important for understanding security market's future.

### **4.2.1 Security Products in New York Stock Exchange<sup>36</sup>**

New York Stock Exchange is a global operator of financial markets and provider of trading solution. They offer an array of products and services in cash equity, futures, options, swaps, exchange-trade-products (ETPs), bonds, clearing operations, market data, commercial technology solution and carbon trading, all designed to meet the evolving need of investors, issuers, financial institution and market participants. And some new ideas also influence the products of New York Stock Exchange, the future of NYSE's products will be more complete and safety.

#### **4.2.1.1 Equity**

NYSE and NYSE Amex are the only equities markets that offer a rich combination of cutting edge, ultrafast technology with the volatility buffer of human judgment and accountability to create orderly opens and closes, lower volatility, deeper liquidity and improved prices.

As the world's largest cash equities trading platform, NYSE counts many of the world's most successful businesses among its thousands of listed companies. Since 1792, with brokers agreeing to form under the Buttonwood Agreement, the NYSE has demonstrated unwavering commitment to both issuers and investors.

Capital stocks include both preferred and common stocks. The terms common stock and capital stock are often used interchangeably when a company has no preferred stock.

American Depositary Receipts or ADRs are receipts issued by a U.S. depositary

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<sup>36</sup> Reference : NYSE & Euronext <http://www.nyse.com/>

bank that represent shares of a foreign corporation held by the bank. Because ADRs are quoted in U.S. dollars and trade just like any other stock, they make it simple for investors to diversify their holdings internationally. NYSE Global Shares are ordinary shares of a non-U.S. company that trade in the same form on any market in the world. Global Shares are tracked in a single global registry, and trade in the home currency of each market.

#### **4.2.1.2 Bonds**

NYSE Bonds operates the largest centralized corporate bond market in the U.S., providing an opportunity for participants to trade bonds in a fair, open environment. On NYSE Bonds, firm and executable orders entered by members or sponsored participants are displayed on the order book, and executed on a strict price/time priority.

Efficiently and transparently trade thousands of debt securities on the NYSE Bonds trading platform. The directory of securities consists of a) the corporate debt of any NYSE listed equity or preferred and their wholly owned subsidiaries and b) debt securities listed on the Exchange such as structured products, convertible bonds, municipals, agencies, sovereign debt, and treasuries.

#### **4.2.2 Index in New York Stock Exchange**

In American security market, there have lots of indices in this market. Such as NESE Arca Tech 100, S&P 500 and DJ Industrial index. But for New York Stock Exchange, the most important and most impressive index is NYSE Composite Index.

The NYSE Composite Index is designed to measure the performance of all common stocks listed on the NYSE, including ADRs, REITs and tracking stocks. In January 2003 the NYSE reintroduced the NYSE Composite Index under a new methodology that is fully transparent and rule-based. Under the new methodology, all closed-end funds, ETFs, limited partnerships and derivatives are excluded from the index. As of year-end 2004, the NYSE Composite consists of over 2,000 U.S. and non-U.S. stocks. It is a measure of the changes in aggregate market value of all NYSE-listed common stocks, adjusted to eliminate the effects of capitalization changes, new listings and delistings.

The index is weighted using free-float market capitalization and calculated on both price and total return basis.

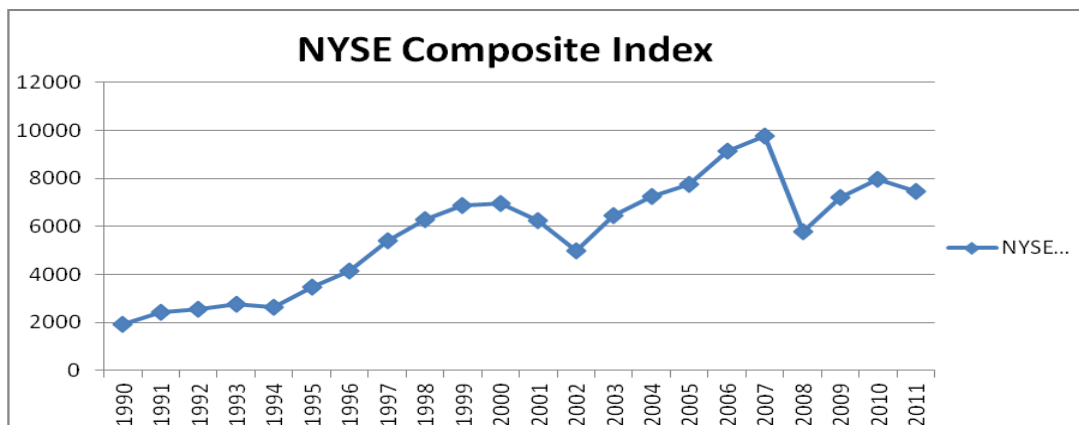
**Table 4.1 Indices in New York Stock Exchange**

Index Name	Mnemo	BB Code	Reuters Code
NYSE Composite Index	NYA	NYA	NYS
NYSE U.S. 100 Index	NYID	NYID	NUS
NYSE International 100 Index	NYIID	NYIID	NIN
NYSE World Leaders Index	NYLID	NYLID	NWL
NYSE TMT Index	NYIID	NYIID	NTM
NYSE Energy Index	NYEID	NYEID	NYE
NYSE Financial Index	NYKID	NYKID	NYK
NYSE Health Care Index	NYPID	NYPID	NYP

Source: NYSE & Euronext Fact book

In the chart 4.2, it shows the change of equities in New York Stock Exchange. This chart clearly shows the crash after 2001 and the economic recovery after 2003. And the sharp drop from 2007 to 2008.

**Chart 4.2 Change of NYSE Composite Index (Yearly)**



Source: NYSE

### 4.3 Transaction and Market Capitalization in New York Stock Exchange<sup>37</sup>

The NYSE is open for trading Monday through Friday from 9:30am – 4:00pm, with the exception of holidays declared by the Exchange in advance.

<sup>37</sup> Reference : NYSE & Euronext About NYSE <http://www.nyse.com/>

**Table 4.2 Transaction Information of New York Stock Exchange**

Trading Information		
Types of Securities Traded	Name of Trading System	Trading Hours
Stocks, Bonds	Floor Trading,	9:30-16:00
Warrants, ETFs	Auction Market with Specialists.	
Supervisory Body	Name of Clearing & Settlement organization	Settlement Cycle
SEC	DTCC	T+3

Source: WFE <http://www.world-exchanges.org/member-exchanges/>

On the trading floor, the NYSE trades in a continuous auction format, where traders can execute stock transactions on behalf of investors. They will gather around the appropriate post where a specialist broker, who is employed by NYSE member firm acts as an auctioneer in an auction market environment to bring buyers and sellers together and to manage the actual auction. They do on occasion facilitate the trades by committing their own capital and as a matter of course disseminate information to the crowd that helps to bring buyers and sellers together.

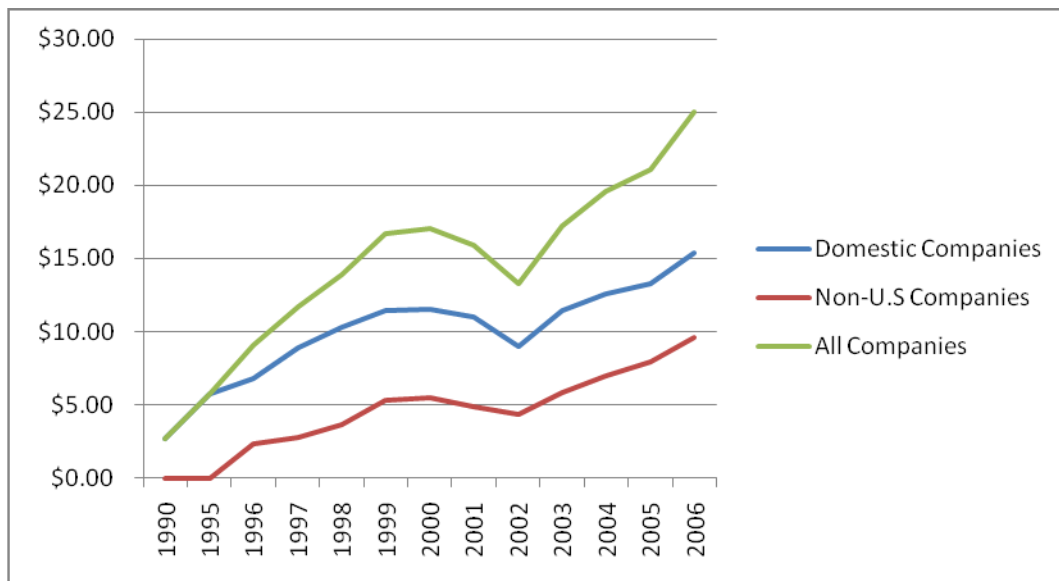
**Table 4.3 Total Market Capitalization of NYSE (1990-2006) \$ in trils**

Year	Domestic Companies	Non-U.S Companies	All Companies
1990	\$2.7	0	\$2.7
1995	\$5.7	0	\$5.7
1996	\$6.8	\$2.3	\$9.1
1997	\$8.9	\$2.8	\$11.7
1998	\$10.3	\$3.6	\$13.9
1999	\$11.4	\$5.3	\$16.7
2000	\$11.5	\$5.5	\$17.0
2001	\$11.0	\$4.9	\$15.9
2002	\$9.0	\$4.3	\$13.3
2003	\$11.4	\$5.8	\$17.2
2004	\$12.6	\$7.0	\$19.6
2005	\$13.3	\$7.9	\$21.1
2006	\$15.4	\$9.6	\$25.0

Resource: NYSE & Euronext Fact Book <sup>38</sup>

<sup>38</sup> The market capitalization of NYSE in table 4.3 is stop at 2006. Because after 2006, NYSE was merge with Euronext.

**Chart 4.3 Total Market Capitalization of NYSE (1990-2006) \$ in trils**



Source: NYSE & Euronext Fact Book

#### **4.4 Listed Companies in New York Stock Exchange**

As the largest stock exchange in the world, New York Stock Exchange is more complete and internationalized. More than 3000 companies were listed on New York Stock Exchange. After 2007, New York Stock Exchange merged with Euronext, NYSE became more international, so far there totally has 80 Chinese Companies listed on New York Stock Exchange. Such large stock exchange needs strength listing rules.

##### **4.4.1 Domestic Listed Companies in New York Stock Exchange**

Domestic listing requirements call for minimum distribution of a company's shares within the United States as well as minimum financial criteria. Distribution of shares can be attained through U.S. public offerings, acquisitions made in the U.S.

- The number of beneficial holders of stock held in "street name" will be considered in addition to the holders of record. The Exchange will make any necessary check of such holdings that are in the name of Exchange member organizations;
- In connection with initial public offerings, spin-offs and carve-outs the NYSE will accept an undertaking from the company's underwriter to ensure that the offering



will meet or exceed the NYSE's standards;

- If a company either has a significant concentration of stock or changing market forces have adversely impacted the public market value of a company that otherwise would qualify for an Exchange listing, such that its public market value is no more than 10 percent below the minimum, the Exchange will consider stockholders' equity of \$60 million or \$100 million, as applicable, as an alternate measure of size;
- Pre-tax income is adjusted for various items as defined in Section 102.01C of the NYSE Listed Company Manual;
- Represents net cash provided by operating activities excluding the changes in working capital or in operating assets and liabilities, as adjusted for various items as defined in Section 102.01C of the NYSE Listed Company Manual;
- Global market capitalization for already existing public companies is represented by the most recent three months of trading history in the case of Pure Valuation with Revenues. For all other standards, the measurement is "point in time" for existing public companies. For IPOs, spin-offs and carve-outs, it is represented by the valuation of the company as represented by, in the case of a spin-off, the distribution ratio as priced, or, in the case of an IPO/carve-out, the as-priced offering in relation to the total company's capitalization.

#### **4.4.2 Non-US Companies Listed in New York Stock Exchange**

The Exchange offers two sets of standards – worldwide and domestic – under which non-U.S. companies may qualify for listing. Both standards include distribution and financial criteria. But for Non-US companies the listing standards is more strength and complexity. Only excellent foreign companies could list on NYSE.

- The number of shares held by the public not less than 250 shares;
- The number of shareholders with more than 100 shares of not less than 5000;
- The company's stock market value of not less than 100 million U.S. dollars;
- Company must be in the last three financial years for profit, and not less than \$ 2.5 million in the last year, the first two years of not less than \$ 2,000,000 per year or

less than the \$ 4.5 million in the last year, 3 years accumulated less than \$ 6,500,000;

- Company's net tangible assets of at least \$ 100,000,000;
- The company's management and operation of a number of requirements;
- Other relevant factors, such as the relative stability of the industry, the company's position in the industry, the market situation of the company's products, the company's prospects, the public's interest in the company's shares.

**Table 4.4 Number of Listed Companies in NYSE (1990-2008)**

<u>Year</u>	<u>U.S. Number of Listed Companies</u>	<u>Non U.S. Number of Companies</u>	<u>Total Number of Companies</u>
1990	1,678	96	1,774
1991	1,779	106	1,885
1992	1,967	122	2,089
1993	2,196	165	2,361
1994	2,354	216	2,570
1995	2,429	246	2,675
1996	2,603	304	2,907
1997	2,691	356	3,047
1998	2,722	392	3,114
1999	2,619	406	3,025
2000	2,428	434	2,862
2001	2,336	462	2,798
2002	2,310	473	2,783
2003	2,124	467	2,591
2004	2,182	460	2,642
2005	2,254	453	2,707
2006	2,313	451	2,764
2007	2,383	422	2,805
2008	3,097	410	3,507

Source: New York Stock Exchange

According to the Table 4.3, more and more non-US companies are listed on NYSE, It make NYSE become more and more internationalization.

In August, 2011, there total have 80 Chinese companies listed in NYSE. Most of them are high-tech stock and biology.

#### **4.5 Regulation and Supervision in New York Stock Exchange<sup>39</sup>**

US Federal Securities laws have established a two-tiered system for the regulation of securities market and market participants. The first tier consists of the SEC, which has primary responsibility for enforcing federal securities laws and regulations and is subject to Congressional oversight. The second tier consists of the regulatory responsibilities of self-regulatory organizations (SROs) over their registered with, and regulated by the SEC.

NYSE Regulation, Inc. is an independent not-for-profit corporation dedicated to strengthening market integrity and investor protection. A subsidiary of NYSE Euronext, NYSE Regulation's board of directors is comprised of a majority of directors unaffiliated with any other NYSE board. As a result, NYSE Regulation is independent in its decision-making.

As self-regulatory organizations, NYSE Euronext U.S. securities exchanges are responsible for enforcing compliance by their members with exchange rules and applicable federal securities requirements, as well as monitoring and enforcing compliance by listed companies with applicable listing standards. NYSE Regulation performs and oversees these self-regulatory organization responsibilities and functions, through a combination of intercompany delegation agreements and regulatory services agreements.

NYSE Regulation, Inc. oversees FINRA's performance of these services, enforces listed company compliance with applicable standards, and oversees regulatory policy determinations, rule interpretation and regulation related rule development. NYSE Regulation consists of the following functional groups:

- Listed Company Compliance;
- Regulatory Policy and Management;
- Stock Watch;
- Regulation Administration.

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<sup>39</sup>Source : NYSE & Euronext Regulation <http://www.nyse.com/>

***Listed Company Compliance.*** The U.S. securities exchanges require listed companies to meet each exchange's respective original listing criteria at listing, and to thereafter maintain compliance with the respective continued listing standards. Listed Company Compliance monitors and enforces compliance with these standards.

***Regulatory Policy and Management.*** Regulatory Policy and Management has primary responsibility for overseeing the regulation related rule development and interpretation functions for the U.S. securities exchanges and overseeing FINRA's performance of its contractual obligations to the U.S. securities exchanges.

***Stock Watch.*** Stock Watch conducts limited real-time monitoring of trading activity on the facilities of the U.S. securities exchanges. Suspicious activity is referred to FINRA for further investigation.

#### **4.6 Function and Contribution for USA Development**

In 1494, America is a huge discover for the world, after that this New World started its own history. The immigrants from all over the world came to America, start their new life. With the economy in America development and fight for high tax, the local citizens decided to establish their independent country. From United State was established, finance play an important role for this country's development, so do New York Stock Exchange.

- Help USA development and America economy development<sup>40</sup>;
- Maintain USA Security Market.

##### **4.6.1 Help USA Development**

New York Stock Exchange was established in 1792. During the Civil War, in order to collected more money for the war, government issued lots of bonds, and the brokers helped government to sell the Government's bonds. Because of the successful selling, government had enough reserve to fight with Confederates States of America. At that time, New York Stock Exchange provided transaction place for brokers. In another word,

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<sup>40</sup>Source : <http://www.ce.cn/>

New York Stock Exchange provided important function in Civil War's finance operation.

USA is a capitalist nation since it was established. Capital market's development is significant for American development. New York Stock Exchange provided transaction about equity and bond at that time. It help the capital has an efficient liquidity in whole market. Follow the Industrial Revolution, the demand of capital was increasing, New York Stock Exchange show it role: raising capital for businesses expansion and facilitating company development. In 19<sup>th</sup> to 20<sup>th</sup> century, according to liberty and effective capital market, American economy had very good development. After 1929 the finance crisis, United State Federal Government issued lots of laws about security. New York Stock Exchange was regulated at that time. But in the end of 20<sup>th</sup> century, Federal Government relaxed the regulation for security market, New York Stock Exchange improve American economy again with the Third Industrial Revolution. New York Stock Exchange helped lots of high-technology companies raise funds, and Facilitating company development.

New York Stock Exchange because of its huge market size and financing capacity, for a long time to become an important driving U.S. economic growth. The companies stand a main position in the U.S. national economy, mostly New York Stock Exchange listed companies. Now, this blue-chip has become a typical symbol of the New York Stock Exchange.

#### **4.6.2 Maintain USA Security Market**

Before the regulation applied in security market, insider trade, fiscal cheat and immorality transaction is very normal in security transaction. At that time, New York Stock Exchange only played his basic role: provide trade place and raise capital for some companies. In the end of 19<sup>th</sup> century, stock exchange was only provide transaction and service for brokers and rich people, after 19<sup>th</sup> century, with the stock market development and newspaper report, stock exchange generally opened for normal individual investor. It's also brought the booming of stock market in the beginning of 19<sup>th</sup> century.

In 1929, the stock market started to decreased. After the dropped from stock market, whole America dropped into finance crisis at that time. It shows the weakness in stock exchange's organization and regulation. The 1933 Securities Act focused on primary markets, ensuring disclosure of pertinent information relating to publicly offered securities. The Securities Exchange Act established the Securities and Exchange Commission (SEC) as the primary regulator of US securities markets. In this role, the SEC gained regulatory authority over securities firms. With SEC's regulation, New York Stock Exchange played its further roles.

After the Second World War and Third Industrial Revolution, structure of finance and information transfer model was changed. New York Stock Exchange accepted those changes and adjusted its product and transaction. The computer was widely used in New York Stock Exchange, and transaction became more effective and large. And New York Stock Exchange started the international board, accepted foreign companies listed on its exchange. Complete products and mature transaction rules help whole economy development. And financial derivative also development in short time.

#### **4.7 Disadvantages of New York Stock Exchange**

However, this mature stock exchange also face lots risk when exchange development. In 2008, American economy dropped into downturn because of financial crisis. But in this crisis, we can learn lot of experiences and lessons. New York Stock Exchange has some disadvantages either.

- Regulation and supervision is lag behind;
- Risk of management and products.

##### **4.7.1 Regulation and Supervision is Lag Behind.**

When we look back to American securities market's history, it's easy to find out that the regulation and supervision in American securities market is always lag behind. The finance crisis in 1929, the finance crisis in 1969, the finance crisis in 2001 and finance crisis in 2008, every crisis brought new laws or new system to us, but New York Stock Exchange couldn't find out or stop the risk before the crisis. The SOR's model is

non-effective as we thought before. New York Stock Exchange should improve their own regulations and supervision, try to find out the disadvantage factors for market before the crisis.

#### **4.7.2 Risk of Management and Products**

In 2007, New York Stock Exchange was merged with Euronext, the NYSE Euronext became the largest security transaction market in the world. And 2011, NYSE Euronext is being acquired by Deutsche Boerse AG, then this stock exchange's scale became more and more big, more and more international.

Following the big scale and high internationalization, this exchange will face more risk than before. Every single stock exchange in NYSE Euronext has its own special rules and culture background. In short time, the international will bring huge profits for market and exchanges, but in interim period, it will bring some risk. New York Stock Exchange has to improve its own ability for future development.

The product variety becomes more and more various. The finance derivative products were widely traded in New York Stock Exchange. Funds, options, futures and ETPs those products bring huge return, but at the same time, it also brings huge loss for some investors. In the stock market transaction, only 20% investors could have profitability, other 80% investors must face with the loss. But when we face with finance derivative these high financial leverage products, the investment becomes more risk than normal security products. New York Stock Exchange has to issue more regulations to protect risk from derivative market.

#### **4.8 Future of New York Stock Exchange**

As the largest stock exchange in the world, New York Stock Exchange has lots of advantages and model functions for other stock exchanges. However, the time is always walking, if you don't improve, if you don't move, you will be left behind.

For New York Stock Exchange, the most important event in recent years is the merger with the NYSE Euronext. And for its future development, the LIFFE was merged by Euronext. It will help NYSE Euronext have more widely transactions and products. And

in 2010, NYSE Euronext plan to merge with Deutsche Börse. Unlucky, in Feb 2012, EU refused this plan. However, it's easy to find the NYSE Euronext future plan. It will merge with other stock exchange, and extend its scale and operation.

At the same time, NYSE try to improve their technology for trade system and service system, even though they already have the most advanced technology in the world. The information and speed is the success. If they have higher technology to support the transaction and clearing, then they will always in the advantage.

In the end, follow the finance development, it's very important to innovate products and transaction regulation.



## **5 Comparison of the Selected Stock Exchange**

New York Stock Exchange has the largest and most mature trading market, this market attract the investors from all over the world by its variety products, large scale and high liquidity. With 300 years development, New York Stock already has different markets for different investors, and the regulations and security law is more complete than other country.

Shanghai Stock Exchange only have 21 years of history, it's also the transfer products from planned economy to market economy. Comparing Shanghai Stock Exchange and New York Stock exchange is good for China's securities market development.

### **5.1 History and Development**

American stock market has almost 300 years history, and New York Stock Exchange already established 220 years. But New Chinese stock market is only less than 30 years of history and before the New China established, China's capitalist economy history just started by war in the end of 18<sup>th</sup> century.

From the reason of origins of stock market and stock exchange, American stock market and stock exchange was natural products which adapt to the capitalist free market economy. In the 300 years history of American stock market and stock exchange the regulation history only has 80 years. However, China's stock market and stock exchange was based on opening and reform policy, specially the Shanghai Stock Exchange was established because the state-owned companies lack of capital. One the one hand, according to Chinese special share structure, there still have 1/8 shares in state-owned companies can't trade in stock market. If those non-tradable shares could trade in stock market, then China will face two main problems. Firstly, the different price between non-tradable shares and tradable shares will attract hot money. And in short time, according to the change of shares' quantity, China stock market will face with huge pressure on transaction. Secondly, normally the non-tradable shares will sale to domestic investors. If there still have lots of shares are non-tradable, and foreign investors can't invest it. Than this unbalance situation will make China stock market

hard to connect with world.

On the other hand, according to the short history of securities, it's easy to find out the weakness of investors. For instance, according to the A shares market, the investors almost is domestic investors. For most of those investors, especially the medium and small investor, they don't have the enough professional financial knowledge and principle of investment. They only want to get profits from stock market. It result the speculation is very common in China stock market. In 1998, China's fund industry started its operation. After few year of development, the medium and small investors started to believe funds and professional manager. The lack of profession knowledge will lead medium and small investors to some institution investors. It's good for China stock market development. Because those collected money is managed by fund manager whom has high professional knowledge. It will decrease the speculation in stock market.

If China want to be more important in finance world, it's necessary to make the RMB become international. In this international and global environment, if the currency can't flow in the world, it will be hard to become internationalization. However, the internationalization of RMB is not only depends on China's government policy, but also rely on other countries' support. The most important for China's stock market future development is independent and international. Nevertheless, we can't forget the monetary policy of China-fixed exchange rate. If RMB become international currency, the exchange rate of RMB will be floating rate, instead of fixed exchange rate. And China will face with hot money and instability economy. It will become a huge challenge and opportunity for China.

According to American history, US dollar also uses long time to become the international currency. The Bretton Woods System brings the fortune and power to American. The chief features of the Bretton Woods system were an obligation for each country to adopt a monetary policy that maintained the exchange rate by tying its currency to the U.S. dollar. It was maintain the U.S. superpower situation after the Second World War. However, in the 1970's-1980s' it also bring the disaster for American. The breakdown of Bretton Woods System and American loose monstaryresult in the financial crisis in 1970's. Stock market, real estate industry and

some financial institution came to a bad environment. The inflation rate and unemployment rate is very high in U.S.

Base on those different history, different culture and different national condition. We can also see a line for the history, for the future.

## **5.2 Number of Listed Companies and Market Capitalization**

As the largest stock transaction market, New York Stock Exchange has more than 3000 listed companies. And there more than 8000 listed issue in NYSE Euronext. As a global leader exchange, 7 of Fortune of Top 10 Global Admired are listed on NYSE Euronext. Most of those listed companies are the excellent companies. The world's Fortune 500 companies, of which over four hundred companies listed on the NYSE. It's 84% of the Fortune 500. The famous index DJ Industrial Average, more than 90% samples of Dow Jones Industrial Average choose from New York Stock Exchange. The market capitalization of listed companies in NYSE is US\$14.242 trillion as of Dec 2011. And New York Stock Exchange also has very high level of internationalization, until August 2011, there total have 80 Chinese companies listed on New York Stock Exchange.

Until May 7, 2012, Shanghai Stock Exchange has 940 listed companies. But until now, Shanghai Stock Exchange does not have any laws or documents for foreign companies listing on Shanghai Stock Exchange. But after 2012, China's government decided to build Shanghai as an international finance city, so Shanghai Stock Exchange is plan to establish international board for foreign companies.

According to table 5.1, it's obviously to see the number of listed companies in New York Stock Exchange is much more than Shanghai Stock Exchange. But when we think about the history and development between those two stock exchanges, it's a normal result about such big gap between New York Stock Exchange and Shanghai Stock Exchange. If we based on chart 5.1, it's clearly to know the change and trend of number of listed companies in those two stock exchanges. From 1991-1998, the number of listed companies in New York Stock Exchange was increased. After that from 1998 to 2003, the number of listed companies in NEW York Stock Exchange was decreased, but

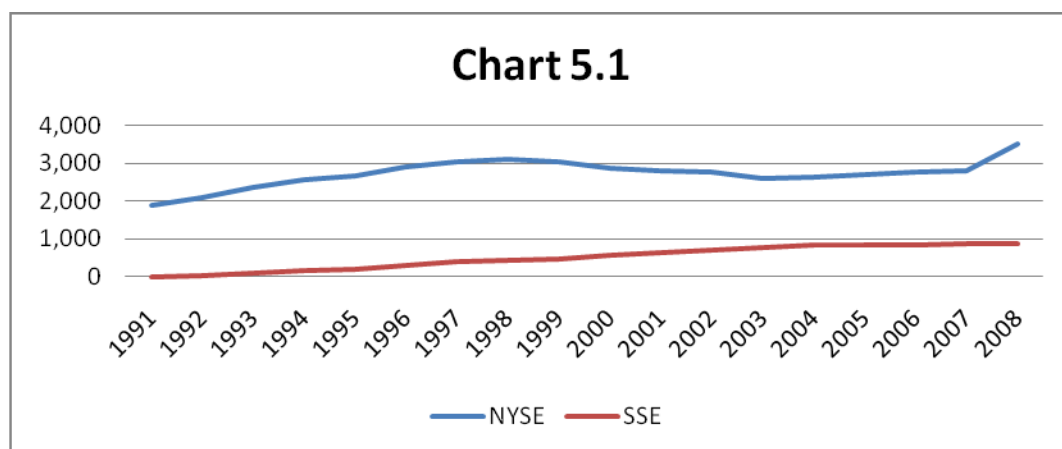
the trend of decreasing is not very heavy. It's almost stability. And after 2003, it was an increasing trend of number of listed companies in New York Stock Exchange. Specially, after 2007, the trend of increasing was very sharp. It's because the NYSE was merge with Euronext.

**Table 5.1 Comparison Number of Listed Companies in NYSE and SSE (1991-2008)**

Year	NYSE	SSE
1991	1,885	8
1992	2,089	29
1993	2,361	106
1994	2,570	171
1995	2,675	188
1996	2,907	293
1997	3,047	383
1998	3,114	438
1999	3,025	484
2000	2,862	572
2001	2,798	646
2002	2,783	715
2003	2,591	780
2004	2,642	837
2005	2,707	834
2006	2,764	842
2007	2,805	860
2008	3,507	864

Source: NYSE & Euronext    SSE

**Chart 5.1 Numbers of Listed Companies in NYSE and SSE**



Source: NYSE & Euronext    SSE

When we see the line that the number of listed companies in Shanghai Stock

Exchange. It's clearly to find that the trend is always increasing. The growth degree is much higher than New York Stock Exchange and the increasing in Shanghai Stock Exchange is more stability than New York Stock Exchange.

Because of the different condition and regulation, the listing company in New York Stock Exchange and Shanghai Stock Exchange has lots of different requirement and level. Generally, the requirement and level in New York Stock Exchange is higher and serious. For instance, New York Stock Exchange standard for listing companies that no less than 700 million RMB (exchange rate:\$1= ¥7.0), and Shanghai Stock Exchange standard for listing company only more than 50 million RMB. The standard for enter New York Stock Exchange is high and strength. And it's more international. In Shanghai Stock Exchange, there isn't law for foreign companies listing in Shanghai Stock Exchange. However, Shanghai Stock Exchange plan to start international board in 2020.

**Table 5.2 Comparison Market Capitalization of NYSE and SSE (2004-2010)**

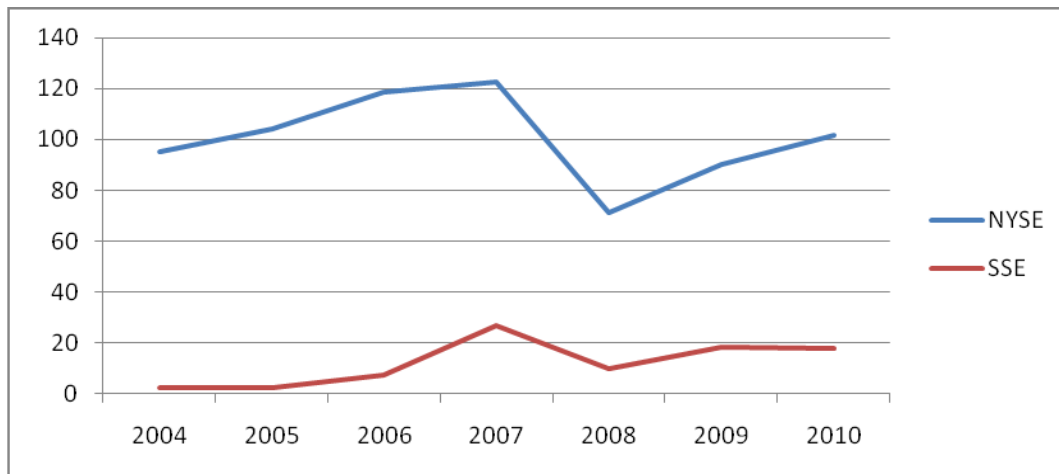
		¥ in trils <sup>41</sup>
Year	NYSE	SSE
2004	94.92	2.61
2005	104.37	2.31
2006	118.51	7.16
2007	122.57	26.98
2008	71.26	9.73
2009	90.23	18.47
2010	101.57	17.90

Sources: NYSE & Euronext Fact Book      SSE Fact Book 2004-2011

According to the table 5.2, it's obviously to find out the total market capitalization in New York Stock Exchange is much more than market capitalization in Shanghai Stock Exchange. In 2004, it's the more than 36 times Shanghai Stock Exchange. After 6 years, it's become more than 5 times Shanghai Stock Exchange. It's a remarkable increasing for Shanghai Stock Exchange.

**Chart 5.2 Comparison Market Capitalization of NYSE and SSE**

<sup>41</sup> Assume that Exchange Rate is \$1=¥7



Sources: NYSE & Euronext Fact Book      SSE Fact Book 2004-2011

According to the Chart 5.2, we can easily see the variation tendency of market capitalization between NYSE and SSE. From 2004 to 2006, both of stock exchanges have an increasing trend. But in the New York Stock Exchange, the range of increasing is much higher than Shanghai Stock Exchange. In 2006-2007, the situation is changed. In Shanghai Stock Exchange, the range of increasing is much higher than New York Stock Exchange. Because of the global financial crisis in 2007-2008, the market capitalization in both of stock exchanges was decreasing. But the range of decreasing in New York Stock Exchange is more serious. After 2008, the market capitalization in both of stock exchanges is increasing. And New York Stock Exchange has better increasing.

Since 1993, the first Chinese company was listed on New York Stock Exchange. After 2007, more and more Chinese companies started listed on New York Stock Exchange. Before August 2011, there total have 80 Chinese Companies listed on New York Stock Exchange. Most of those Chinese companies are high-technology and state-ownership companies. Most of the Chinese companies listed on New York Stock Exchange are not only looking for high return, they also looking for the international environment. If those companies listed in China, they will lose lots of investors. Because China has very strict requirement for foreign investor invest in share A and share B. The mature and international stock market could bring more potential development for those companies.

**Table 5.3 Top 10 Companies by Market Capitalization in NYSE 2011 (¥ billion)**

Range	Name	Market Capitalization
1	Exxon Mobil Corporation	2653.7
2	BHP Billiton Limited	1731.8
3	PetroChina Company Limited	1678.6
4	PetroleoBrasileiro SA	1654.8
5	BHP Billiton plc	1512.7
6	Royal Dutch Shell plc	1440.6
7	China Mobile Ltd.	1395.1
8	Berkshire Hathaway Inc	1394.4
9	General Electric Company	1383.2
10	Wal-Mart Stores, Inc	1345.4

Source: <http://topforeignstocks.com/>

**Table 5.4 Top 10 Companies by Market Capitalization in SSE 2011 (¥ billion)**

Range	Name	Market Capitalization
1	XD Sinopex	1478.3
2	ICBC	1099.9
3	Agricultural Bank of China	773.4
4	Bank of China	588.5
5	Sinopex	453.9
6	China Shenhua Energy	409.5
7	China Life Insurance	346.9
8	Kweichow Moutai	247.1
9	China Merchants Bank	198.7
10	Ping An Insurance	196.6

Source: SSE

According to the table 5.3 and 5.4, the biggest market capitalization company in NYSE is double market capitalization in SSE. And the largest market capitalization company in SSE is just a little bigger than the 10<sup>th</sup> market capitalization company in NYSE. The 10<sup>th</sup> market capitalization company in NYSE is 7 time 10<sup>th</sup> market capitalization company in SSE. Base on those information and result, it's very obviously to say that SSE is much smaller than NYSE.

### 5.3 IPO

Initial Public Offerings (IPOs) is the first sale of stock by a company to the public. IPOs are often issued by smaller, younger companies seeking the capital to expand, but can also be done by large privately owned companies looking to become publicly traded. In

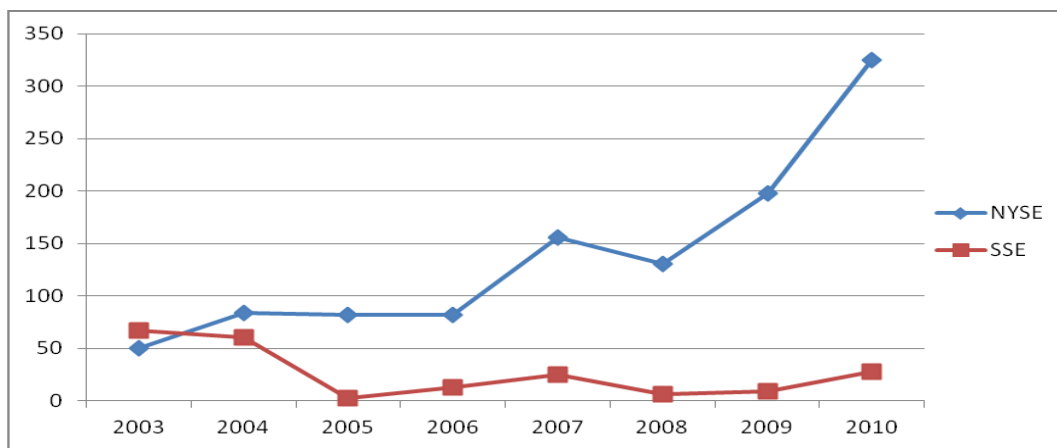
an IPO, the issuer obtains the assistance of an underwriting firm, which helps it determine what type of security to issue (common or preferred), the best offering price and the time to bring it to market.

**Table 5.5 Numbers of IPOs between NYSE and SSE (2003-2010)**

Year	2003	2004	2005	2006	2007	2008	2009	2010
NYSE	50	84	82	82	156	131	198	325
SSE	67	61	3	13	25	6	9	28

Source: NYSE/NYSE Arca SSE

**Chart 5.3 Numbers of IPOs between NYSE and SSE (2003-2010)**



Source: NYSE/NYSE Arca SSE

According to table 5.5 and chart 5.3, it obviously tells us the changed number of IPOs. The number of IPOs in NYSE was sharply increasing after 2006, because of the merger with Euronext, and after 2006, the number of IPOs included in NYSE Arca market. Based on chart 5.3, since 2004 the number of IPOs in SSE is less than 30.

However, NYSE IPOs generally increasing. The trend of the number of IPOs between NYSE and SSE is almost similar. They both decreased in 2007, because of the global financial crisis.

Nowadays, the number of IPOs is not too much, but following the development of the securities market, the IPO market must have a good performance.

## 5.4 Products



New York Stock Exchange is a global operator of financial markets and provider of trading solution. They offer a series of products and services in cash equity, futures, options, swaps, exchange-trade-products (ETPs), bonds, clearing operations, market data, commercial technology solution and carbon trading, all designed to meet the evolving need of investors, issuers, financial institution and market participants.

As far as 2010, there have four securities productions listed on Shanghai Stock Exchange: stocks, bonds, funds, warrants. According to the market economy system of socialism with Chinese characteristics, the stocks in Chinese stock market are divided into two types: Class A Shares and Class B Shares. The Class A Shares limited to domestic investors as well as QFIIs (Qualified Foreign Institution Investors) only while Class B Shares available to both domestic and foreign investors.

As we can see, the New York Stock Exchange has more complete products and services. However, Shanghai Stock Exchange has some special products, A share and B shares is more suitable for China's development. However, foreign individual investor can't participate in A shares market after 2003 only several foreign institution investors have the QFII right to invest in A shares. However B shares market stay in a downturn period since 1999.

New York Stock Exchange also provides the bond transaction for individual and institution investors. NYSE Bonds operates the largest centralized corporate bond market in the U.S, providing an opportunity for participants to trade bonds in a fair, open environment. On NYSE Bonds, firm and executable orders entered by members or sponsored participants are displayed on the order book, and executed on a strict price/time priority. In Shanghai Stock Exchange, there totally have 702 bonds, the market value of those bonds is 745.316 billion RMB. It's included in 136 T-bonds, 60 local government bonds, 352 financial bonds and corporate bonds, 14 convertible corporate bonds, 125 company bonds and 15 detachable warrants. The scale of bond transaction in Shanghai Stock Exchange is much smaller than New York Stock Exchange. China's fund market is just starting period, until 2012, there only 36 funds listed on Shanghai Stock Exchange.

After stock, bonds and funds, Shanghai Stock Exchange doesn't have futures,

options and swaps. China's government allowed the Stock Index Future transaction from April 2010. But until now, the Stock Index Future market still very immature. But the Stock Index Future is not belongs to Shanghai Stock Exchange. About the options and swaps, China's financial derivative market just starting. So, it can't compare with New York financial derivative market.

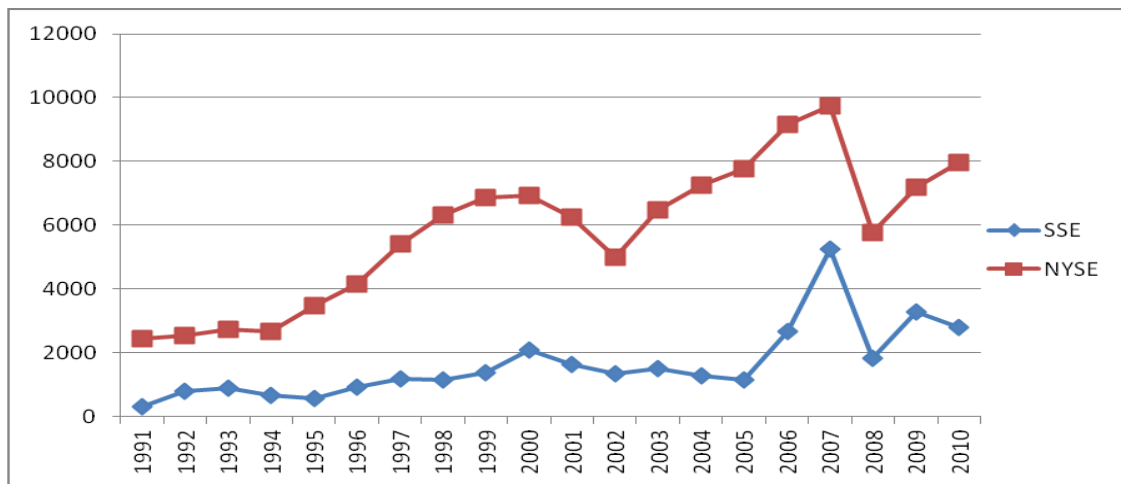
## 5.5 Index

Two different stock exchanges have different indices to guide the investment operated in their exchange. And the indices can not only provide basic information for the market and transaction, but also serves as Economic Barometer. In the 2008, the financial crisis made indices in all over the world decreasing. Appropriate information could help marker and exchange become more fair and mature. Even though, Shanghai Stock Exchange already has appropriate information public.

**Table 5.6 Composite Index between SSE and NYSE (1991-2010)**

Year	SSE	NYSE
1991	293.74	2426.04
1992	780.39	2539.92
1993	883.8	2739.44
1994	647.87	2653.37
1995	555.29	3484.15
1996	917.02	4148.07
1997	1194.1	5405.19
1998	1146.7	6299.93
1999	1366.58	6876.1
2000	2073.48	6945.57
2001	1645.97	6236.39
2002	1357.65	5000
2003	1497.04	6465
2004	1266.5	7253.73
2005	1161.06	7761.491
2006	2675.47	9150.798
2007	5261.56	9754.751
2008	1820.81	5765.058
2009	3277.14	7194.792
2010	2808.08	7971.829

**Chart 5.4 Composite Index between SSE and NYSE**



Source: SSE <http://www.forecast-chart.com/historical-nyse-composite.html>

One of stock role is Information offering and transparency. Stock index is the basic information about trade in exchange. About Index, New York Stock Exchange and Shanghai Stock Exchange have their different indices for the transaction.

New York Stock Exchange has lots of indices for different industry and different product. For instance, the indices are included in indices for NYSE equity, NYSE Arce equity, NYSE Amex equity and so on. The basic index provided by New York Stock Exchange is NYSE Composite Index, The NYSE Composite Index is designed to measure the performance of all common stocks listed on the NYSE, including ADRs, REITs and tracking stocks. At the same time, there also have lots of famous indices consider about New York Stock Exchange transaction, such as Dow Jones Industrial Average and Standard Poor's Index.

However, in Shanghai Stock Exchange, there only have lots of indices provided by Shanghai Stock Exchange, no more other Indices provided by some financial service company. SSE indices are price indices including SSE 180 Index, SSE 50 Index, SSE Dividend Index, SSE New Composite Index, SSE Composite Index, Sector Indices, SSE Fund Index, SSE Government Bond Index and SSE Corporate Bond Index. Among them, the earliest one compiled was SSE Composite Index.

## 5.6 The Transaction

The transaction is the most important part for stock exchange, the transaction rule and productions have lots of different between New York Stock Exchange and Shanghai Stock Exchange.

**Table 5.6 Top 10 Most Traded Stocks by Turnover Volume in SSE 2010**

Rank	Short Name	Trading Volume
1	Agricultural Bank of China	48,857,016,900
2	Minsheng Bank	29,876,069,500
3	China Construction	29,765,318,500
4	China Unicom	29,236,183,600
5	ICBC	27,585,493,500
6	Zijin Mining	26,756,968,100
7	CITIC Securities	23,028,912,100
8	Goldfield Industries	20,687,206,500
9	China Merchant Bank	20,380,964,600
10	Haitong Securities	19,849,136,800

Resource: Shanghai Stock Exchange Fact book 2011

**Table 5.7 Top 10 Most Traded Stocks by Turnover Volume in NYSE 2010**

Rank	Short Name	Trading Volume
1	Citigroup (C)	168,879,940
2	Bank of America (BAC)	62,889,395
3	General Electric (GE)	27,051,466
4	Sprint Nextel (S)	24,481,760
5	Pfizer (PFE)	23,833,316
6	Ford Motor (F)	22,407,209
7	Las Vegas Sands (LVS)	19,816,259
8	MGM Resorts International (MGM)	16,638,922
9	MBIA (MBI)	15,462,301
10	Exxon Mobil (XOM)	15,273,310

Source: Market Data Center WSJ.com

Basic on the table 5.5 and 5.6, it's clearly that the Shanghai trade volume is much more than New York Stock Exchange. However, the those tables also show a problem for Chinese Stock market, investors in Chinese are prefer the short time investment. In fact, it's because the lack of knowledge and immature.

The transaction model between NYSE and SSE has some different. For instance, in

NYSE is floor trade model, and in SSE they use the trade states. The trade time is also different. In NYSE the trading time is 9:30-16:00, in SSE is 9:10-11:30, 1:00-3:00. And in NYSE is T+3, however in SSE there have two different way. For A shares is T+1, for B shares is T+3.

## **5.7 Regulation**

Even though, the history of regulation in American securities market only has 80 year, America still has relatively mature regulatory system for securities market than other countries. Unified market regulatory system, the information disclosure as the core of legal system, as well as strict market supervision and planning, those make the United States has a very high level of supervision. It's a self-regulatory organization. However, some companies like Enron and WorldCom Inc still tried to break the law. Specially, in 2008, the Madoff Scheme is the shame of Security Exchange Commission. After the finance crisis in 2008, people start to concern about the weakness of regulation for financial derivative market. So in the future, improve the regulation of financial derivative market become big part of Security Exchange Commission.

Compare with USA Security Exchange Commission, China Security Regulatory Commission still have lots of work to do. According to the construction of China's stock market regulatory system, still need issue laws with Chinese securities market development. Such as in 2010, China start the Stock Index Future and margin trading, Chinese securities laws can't just copy from foreign securities market. Every security laws in China have their own special parts.

Now the uniform regulatory system and legal system has been initially established, the securities market become more and more mature. China Security Regulatory Commission has to expand their horizon and future plan.

## **5.8 Summary**

In the history, NYSE spent more time to develop and improve itself. The time and history bring the experiences and lessons for them. After 300 years, NYSE already became the largest stock exchange in the world. And for its development and expand, in

2006, it merge with Euronext. Shanghai Stock Exchange only has 22 years history, but in short time, it's also become one of the largest stock exchanges in the world. However, the experience can not just copy from other country or culture. China's development is also the experience for itself. In the future, Shanghai Stock Exchange still need to learn and corporate with other excellent stock exchanges.

In the listed companies and market capitalization, there still have huge gap between NYSE and SSE. The NYSE is more international and open, even though it has high level for listing. SSE need try to become more international. And the huge market capitalization in NYSE is the advantage for its future development. SSE should start to attract excellent companies listing on SSE. It will help SSE improvement.

About the products, there is no doubt that SSE has lots of potential development room for create products. China just started stock index future in 2010, and there still have lot of financial derivatives are unknown in China securities market.

However, China index is only provided by two stock exchanges, not like USA have lots of companies provide several of indices for investors. The more indices will bring more information and opportunity. It also brings to fair to the transaction in stock exchange.

After all of that the regulation is one of the most important part for stock exchange development. NYSE is a self-regulatory organization. And it's also regulated by SEC. In China, the stock exchanges are regulated by CSRC. But still have some inside trade and financial fraud in China securities market.

The Chinese government plans to build Shanghai as an international center city, the Shanghai Stock Exchange to create as one of the world's core financial center in 2020. But after the study of Shanghai Stock Exchange, there must have a long trip for Shanghai Stock Exchange.

Firstly, Shanghai Stock Exchange still faces with large number of non-tradable shares. Those non-tradable shares are huge hidden trouble for China's securities market development. Secondly, Shanghai Stock Exchange still doesn't allow foreign individual investors invest in A shares market. And it as well as don't allow foreign companies listing on Shanghai Stock Exchange. Foreign investors only have two ways to

participate in Shanghai Stock Exchange: B shares market and QFII. This two situation show Shanghai Stock Exchange still need some time to accept the huge transactions and management. Thirdly, the government has to solve the problem of RMB internationalization. If the RMB couldn't free flow in the international financial market, it's hard to make Shanghai Stock Exchange become the international finance center. Finally, it's necessary to improve the quality of investor, no matter the small or big investors. In most time, the speculation is because of lack of professional knowledge.

Study about New York Stock Exchange brings lots of advises to development of Shanghai Stock Exchange. But at the same time, we need to realize that finance is a double-edged sword. No matter the New York Stock Exchange or Shanghai Stock Exchange, the regulation should always follow with innovation.

## **6. Conclusion**

The U.S. this superpower, developed from a desolate colony to the most powerful country in the world. Capitalist free market economy is the most important instrument for this country's development. As a representative of the U.S. securities industry, the New York Stock Exchange witnessed the history and development of the USA.

As a young stock exchange, Shanghai Stock Exchange really have outstanding performance, just in 22 years development, it's already become the fifth largest stock exchange in the world.

In this thesis, New York Stock Exchange was a reference object because of its mature market and complete trading system. New York Stock Exchange history could bring lots of prompts and advises for China's securities market and stock exchange development. There had more details about the history, products, indices, trading, listed and listing companies and regulation about the two stock exchanges. The core part was part 4: comparison, but specific information was written in part one, part two and part three. According to the comparison, it was more clearly to think about that China's securities market have potential for future development. Such as the futures and option is not generalization in China's securities market, and some other financial derivative is completely unknown to the Chinese market. At the same time, the regulatory system also has a long way to development.

In the future, the New York Stock Exchange will try to extend its market and operation. As the most outstanding developing country, China is one of the most potential markets for New York Stock Exchange future plan. Cooperation between New York Stock Exchange & Euronext and Shanghai Stock Exchange is one future plan for both of them. It not only brings benefit for New York Stock Exchange, it will also help Shanghai Stock Exchange to improve its operation and experiences for future.

In this thesis, market information and market data was the most important thing for study. Just like the knowledge in Security Analysis, the opportunity is always stay in the information. When you know how to gain it, you will gain the success.



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## **List of Abbreviations**

### **Abbreviations**

SEC: Securities and Exchange Commission

NASDAQ: National Association of Securities Dealers Automates Quotation

OTC Market: Over-The-Counter Market

GDP: Gross Domestic Product

GNP: Gross National Product

WFE: World Federation of Exchange

TSE: Tokyo Stock Exchange

SSE: Shanghai Stock Exchange

CSRC: China Securities Regulatory Commission

ESMA: European Securities and Market Authority

CSCCRC: China Securities Central Clearing & Regulation Corporation

QFII: Qualified Foreign Institution Investors

SOX: Sarbanes-Oxley Act

MBSs: Mortgage-Backed Securities

ETPs: Exchange-trade-products

ADRs: American Depositary Receipt

REITs: Real Estate Investment Trust

SROs: Self-regulatory Organization

FINRA: Financial Industry Regulatory Authority

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Ostrava dated

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Haiying Zhang

## List of Annexes

Annexes1 NYSE CompositeIndex(MonthlyChart)

